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Scottish Health Education Unit

# Ten- to-fourteen-year-olds and alcohol

*A developmental study in the  
Central Region of Scotland*

*by P. P. Aitken*

*Volume III*

*An enquiry conducted by the Department of Psychology,  
University of Strathclyde for the Scottish Health Education Unit.*

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Common Services Agency of the Scottish Health Service.

Edinburgh  
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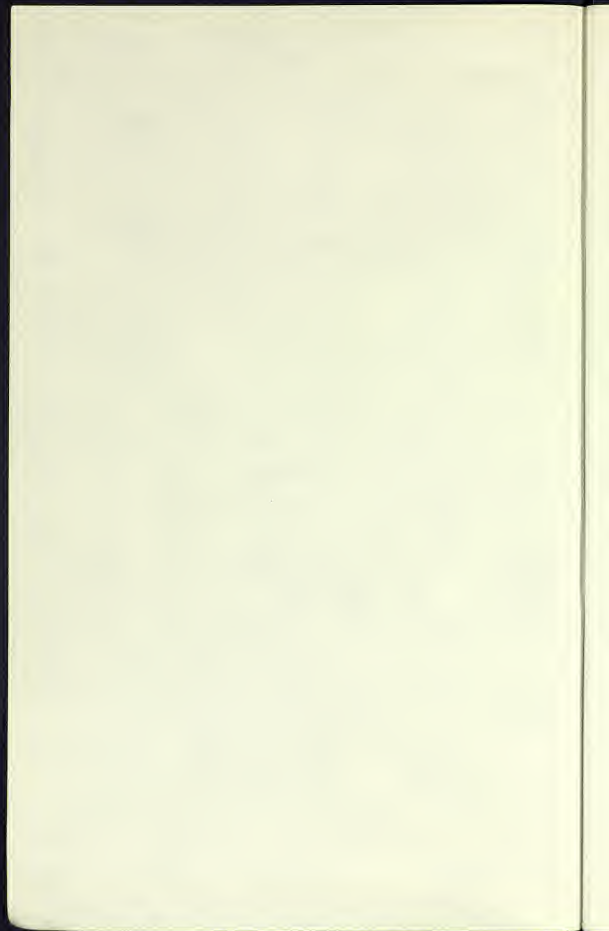
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P.P.A.



# Summary

## Introduction, method and sample (Chapter 1)

1. The abuse of alcohol by some young people has received considerable attention over recent years. Three trends appear to give cause for concern. First, the age at which young people begin to drink has been falling with successive generations. Second, there is some evidence of an increase in the number of alcoholics in their twenties and thirties. Third, the increase in offences related to drunkenness over recent years appears to have been most rapid amongst the young.

2. In response to this concern, the Health Education Unit of the Scottish Home and Health Department commissioned two studies of the development of attitudes and behaviour related to drinking. Investigations with 6- to 10-year-olds (Jahoda & Crammond, 1972) and 14- to 17-year-olds (Davies & Stacey, 1972) indicated that important changes in behaviour/attitudes related to drinking occur between the ages of 10 and 14. The present study was designed to explore the nature of these changes.

3. Individual interview techniques were used to examine six variables which appear to be related to drinking experience:

- Influence of the peer group
- Parental control
- Leisure activities
- Smoking experience
- Perceived characteristics of children who drink
- Judgements of the morality of drinking

4. Interviews were conducted with 384 children. Equal numbers of boys and girls at three ages (10, 12 and 14) were selected from eight school catchment areas (2 working-class, 2 middle-class and 4 mixed working-/middle-class areas). Apart from the constraints of sex, age and catchment area, they were sampled randomly from school registers.

## Drinking experience (Chapter 2)

5. Experience of alcohol is widespread among 10- to 14-year-olds in the areas sampled. Eighty-eight per cent said they had tasted an alcoholic drink. This proportion did not vary with age, sex or catchment area.

6. The proportion of children who never mentioned taking more than a sip or taste (Tasters) decreased with age (from 38 per cent at 10 years to 19 per cent at 14 years). The average amount consumed by children who had taken more than a taste (Drinkers) increased with age. Although the average amount consumed was lower, the age-related increase in consumption was steeper and more dramatic than that reported by Davies & Stacey in the study of 14- to 17-year-olds.

7. The general picture obtained from the children's description of the first drink they could remember taking was similar in many respects to Jahoda & Crammond's account of early drinking experiences in 6- to 10-year-olds. Most of the children said the first drink, usually just a taste or sip, was taken on a special occasion in the parental home. The father was the most frequently mentioned source of the drink.

8. The age when the 'first drink' was taken increased with present age. This suggests that children find difficulty in remembering when they really had their first taste of an alcoholic drink. Although there was no indication of a widespread defensive reaction to the questions about drinking, it is possible that some children are unwilling to admit to trying drinks at an early age. For these reasons, data reported in studies which use retrospective questioning techniques should not be taken entirely at face value. As Jahoda & Crammond suggest, it is likely that most children are given small quantities of alcohol in the parental home during the early years of primary school.

9. The girls tended to report a later age when the first drink was taken. There are several possible reasons for this; however, explanations in terms of the way parents introduce children to alcohol may seem more plausible.

10. Seventy-six per cent (88 per cent of those who had tried an alcoholic drink) mentioned taking a drink in the parental home. On the last occasion when this occurred, drinking appears to have been closely controlled by parents: most 10-year-olds said they were given tastes or sips and drinks of relatively low alcoholic content; thereafter, the amount and alcoholic content of drinks consumed increased with age. A greater proportion of girls than boys were given only a taste or sip. The father was most often mentioned as the source of the drink.

More 12- and 14-year-olds than 10-year-olds said they had the last drink at home on a special occasion. The most plausible explanation for this seems to be that many parents allow young children a sip or taste on occasions which are not special, but exert more control over the larger amounts consumed by 12- and 14-year-olds by limiting drinking in the home to special occasions. This particular control over drinking is probably a temporary measure. Drinking in the home on non-special occasions appears to increase in frequency as young people approach the age of 18 (Davies & Stacey, 1972).

11. Thirty-six per cent (41 per cent of those who had tried an alcoholic drink) said they had taken a drink in the home of an adult relative or friend of the parents. The amount consumed by children who had more than a taste on the last occasion when this occurred increased with age. However, there were no age differences in the numbers given more than a taste or in the numbers given

relatively stronger drinks. The majority had more than a taste. Although usually present, parents were less actively involved in giving drinks to their children.

12. Twenty-one per cent (24 per cent of those who had tried an alcoholic drink) said they had been given a drink on licensed premises. Surprisingly, this proportion did not vary with age. Furthermore, the main trends in consumption were similar to those for the last drink in the parental home: consumption increased with age; in a majority of cases a parent was present and actively involved in providing the drinks; as with drinking in the parental home, the father was most often mentioned as the source of the drink.

More girls than boys said they had taken a drink on licensed premises; however, girls tended to consume less overall.

13. Only a small number of children mentioned drinking in a friend's home or in the open air. Most of these children were 14-year-olds. Twelve per cent of the children in this age group said they had taken a drink in a friend's home, and 11 per cent mentioned drinking in the open air. More boys than girls said they had taken a drink in the open air.

The proportions of 14-year-olds who said they had taken a drink in a friend's home and/or in the open air are smaller than those reported by researchers who have conducted studies in which adolescents completed anonymous questionnaires. (Such techniques are unsuitable for detailed questioning of 10-year-olds.) Although there was no indication of a widespread defensive reaction to the questions about drinking, it is likely that some of the children were unwilling to admit to drinking in these places.

14. There were few differences in the accounts given by boys and girls. Although boys showed a greater 'preference' for beer or lager and more girls than boys consumed drinks like Martini and Advocaat, there were no differences between the proportions of boys and girls classified as Non-drinkers, Tasters and Drinkers. Furthermore, there were no differences in the average amounts consumed by boys and girls classified as Drinkers. Comparisons with the results obtained from the two previous developmental studies commissioned by the Scottish Health Education Unit indicate that sex differences in drinking patterns amongst the young may have decreased over recent years.

15. Eighteen per cent mentioned drinking in the absence of parents. A greater proportion of these children were 14-year-olds. Twenty-nine per cent of children in this age group said they had taken a drink on one occasion or more in the absence of parents.

Children who said they had taken a drink in the absence of parents tended to report higher levels of alcohol consumption than those who said their parents were present when they last had a drink in various settings.

A greater proportion of children who mentioned drinking in the absence of parents said they received their first drink from a source other than a parent.

### **Correlates of drinking (Chapter 3)**

16. Consumption of alcohol did not vary with social class or mother's occupation (full-time housewife or working).

Dight (1976) found that manual workers classified as Regular Drinkers reported higher levels of consumption than other occupational groups; this difference was more pronounced among men than among women. The results of the present study, taken in conjunction with the results obtained in the previous developmental studies, indicate that the social class differences described by Dight begin to emerge between 14 and 17 years; and that these differences emerge earlier among boys than among girls.

17. Smoking experience increased with age. Whereas only 33 per cent of the 10-year-olds said they had tried a cigarette, 58 per cent of the 14-year-olds said they had done so.

There were no differences between boys and girls with respect to smoking experience. This is consistent with suggestions that differences between smoking rates among boys and girls have decreased over recent years.

There was no indication of a relationship between smoking experience and social class. However, children who said they intend to leave school at 16 admitted to more experience of smoking. This finding is consistent with the view that smokers tend to be less academically able than non-smokers.

There was a positive correlation between smoking experience and alcohol consumption. This finding is consistent with the suggestion that drinking and smoking serve similar functions for some young people.

18. The associations between leisure activities and alcohol consumption were similar to those found by Davies & Stacey in the study of 14- to 17-year-olds. Children who mentioned church-related activities tended to report lower levels of alcohol consumption and smoking experience. Children who mentioned discos and organised groups as present spare-time activities, and children who mentioned visiting discos and licensed premises as activities that they will engage in when older, tended to report higher levels of alcohol consumption and smoking experience.

19. Current levels of consumption were associated with the extent to which children said they envied older teenagers. For example, children who reported higher levels of alcohol consumption and smoking experience often said they would like to have more freedom from adult controls.

#### **The morality of drinking (Chapter 4)**

20. The older children made less severe judgements about the morality of children's drinking activities. Although most of the children in each age group expressed considerable disapproval of drunkenness and spirit drinking, the severity of judgements about beer/lager and shandy/cider drinking decreased with age. For example, whereas 56 per cent of the 10-year-olds said that beer/lager drinking was 'always wrong', only 30 per cent of the 14-year-olds did so.

21. Jahoda & Crammond found that most of the 8- and 10-year-olds in their sample were able to distinguish between alcoholic and non-alcoholic drinks. In the present study, the 10-year-olds' judgements of the morality of drinking activities indicate that they were aware that alcoholic drinks vary in potency. This suggests that the concept of alcohol possessed by older primary school



children involves more than just a simple operational scheme enabling them to contrast alcoholic and non-alcoholic beverages.

22. Most of the children in each age group expressed considerable disapproval of 'taking drugs for fun'.

23. Although the majority of children at each age expressed disapproval of smoking, there was a highly significant decrease in the extent of this disapproval with increasing age.

24. Boys tended to be less severe in their judgements of the drinking activities of boys than the girls were with respect to the drinking activities of girls.

The majority of boys and girls made the same judgements about the drinking activities of the opposite sex as they did with respect to their own sex. However, those who made different judgements tended to use a 'double standard' of morality: the drinking activities of girls were judged more severely than the drinking activities of boys.

25. There were no differences between boys and girls with respect to judgements of the morality of smoking. Furthermore, girl smokers were not judged more severely than boy smokers. These findings are consistent with the view that girls' attitudes towards smoking have been changing over recent years.

26. Children who made relatively lenient judgements about the morality of one kind of drinking activity tended to make relatively lenient judgements about other drinking and smoking activities. These children also tended to report higher levels of drinking and smoking experience.

#### **The influence of peers and parents (Chapter 5)**

27. The extent to which the children perceived themselves as being influenced by parental decisions about issues which were not concerned with drinking (Parental Control) decreased with age. The extent to which they perceived themselves as being influenced by peers (Peer Group Pressure) increased with age. Boys and children from working-class catchment areas tended to perceive themselves as being under greater Peer Group Pressure than did girls and children from middle-class catchment areas.

28. The relationships between drinking experience/alcohol consumption and the pressures perceived by boys were simple and clear cut. Non-drinkers saw themselves as being under greater Parental Control and lower Peer Group Pressure than did Drinkers. Boys classified as Tasters occupied a middle position in both respects.

For the boys classified as Drinkers, higher levels of alcohol consumption were associated with relatively low Parental Control and relatively high Peer Group Pressure. However, whereas the association between Peer Group Pressure and consumption tended to increase with age, the association between Parental Control and consumption was stronger at 10 and 12 than at 14 years.

29. The relationships between drinking experience/alcohol consumption and pressures perceived by girls were more complex. The gross differences between

Non-drinkers, Tasters and Drinkers were similar to those found for the boys. However, among girls classified as Drinkers, amount consumed *was not* associated with either of the two kinds of pressure.

If we assume that Parental Control and Peer Group Pressure play an important part in determining drinking patterns, then these findings indicate that although both are important in determining whether or not girls drink, they appear to be of less importance in influencing the amounts consumed by girls who do drink.

### The children's perceptions of drinkers and non-drinkers (Chapter 6)

30. The children rated various kinds of boys and girls in terms of characteristics which appear to describe two major dimensions of behaviour: an Evaluative dimension (describing various 'Good vs. Bad' characteristics) and a dimension which contrasts characteristics of Extraversion-Introversion.

'Boys/girls who drink a lot' were perceived in terms of neutral and negatively evaluated characteristics of extraversion:

- Like discos

- Go out a lot with pals

- Act big, show off

- Get into trouble or fight

'Boys/girls who never drink' were perceived in terms of neutral and positively evaluated aspects of introversion:

- Don't like discos

- Don't go out much with pals

- Don't act big or show off

- Don't get into trouble or fight

Children who drink a lot were generally perceived as being more disliked by grown-ups than by other children, whereas children who never drink were seen as being more liked by grown-ups than by other children.

31. 'Boys/girls that most boys/girls like' were perceived in terms of neutral and positively evaluated aspects of extraversion:

- Go out a lot with pals

- Like discos

- Nice looking

- Easy to get on with

Both sexes tended to see the opposite sex as having a greater preference for the more extraverted members of their own sex.

32. Comparisons between the three stereotypes or images described above indicate that neither the image of the heavy drinker nor the image of the non-drinker provides a good match with the image of the child who is most liked by other children. Although children who drink a lot and children who are most liked by other children were perceived as extraverts (as enjoying discos and going out a lot with pals) the former were seen as *rowdy* extraverts whereas the latter were seen as *easy-going* or *sociable* extraverts. On the other hand, although non-drinkers and children most liked by peers were generally favourably regarded in terms of the characteristics making up the Evaluative (Good vs. Bad) dimension, the former were seen as considerably more introverted than the latter.

33. 'Boys/girls that most boys/girls like' were generally perceived as being more extraverted than 'the ideal self' ('boys/girls that you would like to be like'). The latter was generally perceived as being more extraverted than 'the self' ('boys/girls like yourself'). Thus in this respect 'the ideal self'—and particularly 'the self'—was closer to the image of the non-drinker. However, the match was far from complete: non-drinkers were seen as being more introverted than 'the ideal self' and 'the self'. Even children who said they had never tasted an alcoholic drink tended to perceive 'boys/girls who never drink' as being more introverted than 'the ideal self' and 'the self'.

34. 'Boys/girls who drink occasionally' were generally seen as occupying an intermediate position in terms of the characteristics which differentiated 'boys/girls who drink a lot' and 'boys/girls who never drink'. However, occasional drinkers were generally perceived as being more extraverted than non-drinkers.

35. The images described above represent the 'average' 10- to 14-year-old's perceptions of drinkers, non-drinkers, etc. Additional analyses showed that two main trends were associated with the age variable. First, the children's perceptions of non-drinkers and drinkers and of children who are liked and children who are disliked by their peers tended to become more differentiated with increasing age. Secondly, the older children tended to perceive 'the ideal self' as being more extraverted than did the younger children. This indicates that the image of the child who is most popular with his peers (the easy-going, good-looking extravert) becomes *more* attractive and the image of the non-drinker (the well-behaved introvert) becomes *less* attractive with increasing age.

36. The 14-year-olds classified as Drinkers differed from the other groups in two important respects. First, 'boys/girls who drink occasionally' were more favourably evaluated in terms of the Evaluative (Good vs. Bad) dimension. Secondly, 'the self' was perceived as being more extraverted than introverted. These differences, taken together with the two age-related trends described above, indicate that the 14-year-old Drinkers tended to perceive the occasional drinker, 'the self' and 'the ideal self' as approaching the easy-going, good-looking extravert generally perceived as being most liked by other children. As the majority (72 per cent) of the 14-year-olds were classified as Drinkers, this suggests that the image of the occasional drinker becomes more attractive with increasing age.

37. 'Boys/girls who smoke' were perceived as having similar characteristics to children who drink a lot. In other words, smokers were generally seen as rowdy extraverts. However, although the non-smoker and the non-drinker were both perceived as being well-behaved and introverted, the former was generally seen as being less introverted than the latter.

38. The description of children's perceptions of drinkers and non-drinkers in Chapter 6 provides a simple conceptual framework against which the results of previous studies of drinkers and smokers can be compared. In particular, it offers an explanation of Davies & Stacey's finding that 'the teenager who drinks heavily' and 'the teenager who does not drink' were both perceived as less sociable (and less attractive) than 'the ideal self'. It seems that adolescents

(and preadolescents) perceive heavy drinkers as unsociable because of the rowdy characteristics of their extraverted behaviour whereas abstainers are seen as not particularly sociable because of their perceived introverted characteristics.

### **The characteristics of children who drink more than their peers (Chapter 7)**

39. This section attempts to bring together the major variables associated with higher levels of alcohol consumption. Multiple correlation procedures were used to isolate those variables which accounted for significant proportions of the variance in amounts consumed by boys and girls classified as Drinkers (ie children who said they had taken more than just a sip or a taste when they last had a drink in one or more of the settings described in Chapter 2). The variables isolated are discussed in Chapter 8.

### **General discussion (Chapter 8)**

40. Jahoda & Crammond found that children's attitudes towards drinking and smoking became increasingly negative over the years 6 to 10; their intention to drink when older decreased over the same age span. In the present study, drinking and smoking experience increased with age; drinking in the absence of parents increased between 12 and 14 years. The age-related increase in consumption appears to have been accompanied by a complete reversal in attitudes towards drinking and smoking: judgements of the morality of drinking and smoking decreased in severity over the years 10 to 14.

The first part of the discussion in Chapter 8 considers factors which may account for the increase in consumption and *volte-face* in attitudes towards drinking which appear to occur between 10 and 14.

41. The concept of 'adolescent rebellion' appears to have little explanatory value. First, most of the children, when describing their most recent drinking experiences, said their parents were present. This indicates that much of the increase in consumption between 10 and 14 years occurs under the guidance of and with at least the tacit approval of parents. Secondly, most of the children made severe judgements about the morality of spirit drinking and drunkenness. The age-related decrease in the severity of judgements about the morality of drinking was specifically related to the moderate consumption of relatively weak alcoholic drinks. Thirdly, most of the children perceived 'boys/girls who drink a lot' as possessing characteristics disliked by grown-ups and children. These trends do not appear to reflect a general age-related increase in the extent to which 10- to 14-year-olds are defying or rebelling against parental wishes or values.

42. Although the age-related increase in consumption cannot be explained in terms of simplistic concepts like 'adolescent rebellion', some of the findings discussed suggest that peer group influences are important during the pre-adolescent years. For example, boys and girls classified as Non-drinkers tended to see themselves as being under higher levels of Parental Control and lower levels of Peer Group Pressure than did children classified as Drinkers. Boys and girls classified as Tasters tended to occupy a middle position in both respects.

43. The associations between lower Parental Control/higher Peer Group Pressure and higher average levels of alcohol consumption were more substantial for boys than for girls. The reason for this seems to be that girls (and women) appear to be under less pressure than boys (and men) to 'prove themselves' by drinking large amounts; therefore, contrary pressures from parents are probably not required to the same extent.

44. The relationships between Parental Control/Peer Group Pressure and consumption indicate that the influence of the peer group on the drinking activities of boys becomes more important at the onset of adolescence. This should not be taken to mean that parents have little influence on the amounts consumed by 14-year-old boys. A majority of the boys did not mention drinking in the absence of parents. Furthermore, the results of the multiple correlation analysis described in Chapter 7 indicate that boys who drink in the absence of parents *and* who see themselves as being little influenced by parental decisions drink more than boys who drink in the absence of parents but who see themselves as being likely to take account of parental wishes. This indicates that parental influences on drinking activities are important even when parents are not present.

45. The results described in Chapter 6 indicate that 10- to 14-year-olds perceive their peers as admiring some of the extraverted characteristics of children who drink. Furthermore, it seems that some of the extraverted characteristics perceived as being possessed by drinkers, lacked by non-drinkers and admired by peers become more attractive with increasing age. Thus it seems plausible to suggest that *part* of the age-related increase in consumption is guided by the images or stereotypes which 10- to 14-year-olds have of drinkers and non-drinkers.

46. The results described in Chapters 4 and 6, taken in conjunction with results reported by other researchers, indicate that children's perceptions of drinkers as being more extraverted than non-drinkers have some basis in reality.

47. Associations between extraversion and alcohol consumption can be explained in one or both of two ways. First, given that drinking is often a part of social activities, extraverted children and teenagers may drink because they enjoy such activities. Secondly, extraverted children are probably more susceptible to peer group pressure. If the peer group exerts some pressure in the direction of drinking, then extraverted children may be more susceptible to this pressure.

48. Although the general pattern of results is consistent with the view that the peer group exerts some pressure in the direction of drinking, some of the features of the image of 'boys/girls who drink a lot' were perceived as being unattractive. The question remains, therefore, as to why some young people drink considerably more than their peers.

The multiple correlation analysis described in Chapter 7 showed that two sets of variables were important predictors of higher levels of alcohol consumption amongst the boys. The first set refers mainly to parental influences. The heavier drinkers amongst the boys tended to hold a less strict or more

permissive view of the morality of drinking and smoking, perceived themselves as being less influenced by parental decisions and were more likely to drink in the absence of parents.

The second set of variables refers to the perceptions boys have of themselves and of boys who drink. The heavier drinkers amongst the boys tended to see themselves as rowdy extraverts. However, as they also tended to view 'the ideal self' in a similar manner this means that they were less inclined to condemn rowdy behaviour.

The heavier drinkers amongst the boys also tended to perceive drinkers ('boys who drink occasionally' and 'boys who drink a lot') as easy-going or sociable. However, most of the children perceived children who drink a lot as being difficult to get on with or unsociable. Thus the non-drinkers and moderate drinkers tended to perceive heavy drinkers as *unsociable* rowdy extraverts whereas the heavier drinkers amongst the boys tended to perceive 'boys who drink a lot' as *sociable* rowdy extraverts.

49. The finding that the heavier drinkers amongst the boys perceived themselves as rowdy extraverts is of interest for two reasons. First, as one of the features of 'rowdy extraversion' was getting into trouble or fighting, it is consistent with suggestions that heavy drinking is associated with delinquent behaviour. As Davies & Stacey suggest, it is possible 'that at least a significant proportion of [heavier drinkers] are motivated not only by the desire for toughness, attractiveness, sociability, etc, but by an additional need to express delinquent or anti-adult proclivities through heavy drinking'.

Secondly, the characteristics subsumed under the label 'rowdy extraversion' have much in common with those describing the 'impulsiveness' factor associated with a number of problem behaviours. Of particular importance, it has been suggested that high levels of impulsiveness in childhood and adolescence may be predictive of future problem drinking.

50. The variables which characterised the heavier drinkers amongst the girls bore little resemblance to the variables which characterised the heavier drinkers amongst the boys. Girls who reported higher levels of alcohol consumption admitted to more smoking experience, were more intolerant of non-smokers (and non-drinkers), expressed more envy of the greater freedom given to older girls and tended to perceive occasional drinkers as likely to get into trouble or fights.

The common denominator of this complex of characteristics appears to be a somewhat aggressive involvement in smoking and drinking activities coupled with a desire for more freedom. The underlying factors are difficult to pinpoint. However, it is possible that some of them are related to recent changes in social attitudes towards sexual equality. The heavier drinkers amongst the girls appear to have expressed a general resentment of restrictions on their freedom together with an admission or declaration of their involvement in activities which until recently have been regarded as the prerogative of precocious boys.

This interpretation is admittedly speculative. However, as noted in Chapter 3, a similar explanation has been offered of recent changes in English children's smoking behaviour. In the present study, the absence of marked differences in alcohol consumption between boys and girls and the complex of characteristics which most effectively predicts heavier drinking in girls may represent additional manifestations of this change.

## **Implications for health education (Chapter 9)**

51. No special authority is claimed for the suggestions made in this section. However, the proposals discussed may help to provide a preliminary framework for future debate.

### **Health education in schools: Target groups**

52. Certain findings in the present study, taken in conjunction with results reported by Jahoda & Crammond, indicate that most older primary school children are not naive with respect to alcohol and are aware that alcoholic drinks vary in potency. Therefore some kind of rudimentary education about the effects of alcohol could begin during the later primary school years.

53. Important features of the stereotypes or images which 14-year-olds have of heavy drinkers, non-drinkers, smokers and non-smokers are also present at the age of 10. This suggests that health education directed towards making children more aware of the motivational pressures which may influence drinking activities *could* begin during the later primary school years. Since the influence of the peer group and probably the mass media appear to produce an increasing disposition towards drinking over the years 10 to 14, some elements of health education directed towards making these sources of motivation more apparent might help children to deal with the increasing pressures which they will face during the secondary school years.

### **Health education in schools: Strategies**

54. Health education recommending that children abstain from trying alcoholic beverages would be met with resistance. Many parents probably see the age-related increases in the moderate amounts typically consumed during preadolescence and adolescence as a realistic and useful preparation for adult life. Even for 6- to 10-year-olds, recommendations that children should never taste alcoholic beverages would conflict with experiences which many children have in the parental home. Thus teachers should beware of taking an uncompromisingly negative attitude with respect to children's experiences of alcohol.

55. Young people should be aware of the positive and negative effects of alcohol and of the nature of alcoholism. Since children of about 8 and above appear to be capable of assimilating this kind of information and as such children appear to have a minimal amount of knowledge about alcohol, some kind of rudimentary education about the effects of alcohol should begin during the later primary school years.

56. Sermonising and the use of shock tactics are undesirable. Sermonising probably undermines the credibility of the source of information. Shock tactics may lead to avoidance of those who use such tactics rather than of the harmful object.

57. A recent DES report (Health Education in Schools, HMSO, 1977)



describes how elements of health education can be slipped naturally into various parts of the school curriculum without clumsily drawing children's attention to the topics. Some of the proposals in the DES report are discussed and examples given of how teachers can introduce materials related to alcohol into subject lessons.

58. The provision of information about the effects of alcohol is not sufficient. It would be naive to believe that some young people drink excessively merely because they have not been given information about the possible dangers involved. Certain features of the stereotypes which young people have of drinkers (and smokers) appear to provide important sources of motivation. Young people perceive drinkers and smokers as being generally more extraverted and tougher than non-drinkers and non-smokers. Thus health education strategies should be directed at raising children's awareness of the nature of pressures arising from stereotypical misconceptions and of how stereotypes are used in programmes of mass persuasion.

59. It would be untruthful and therefore unwise for health educators to take the line that the stereotypes which young people have of drinkers and abstainers have no bases in reality. There is an association between extraversion and involvement with and appreciation of alcohol; there does appear to be an association between alcohol consumption and aspects of toughness related to rebellious and adventurous behaviour. Attempts to deny these relationships would probably be met with resistance.

However, it is important that young people realise that such stereotypes present a travesty of reality. Many non-drinkers are not introverts. Furthermore, young people should be aware that excessive drinking does not in some magical way confer sociability or toughness.

60. Many of the children saw themselves *and* their ideal selves as being less extraverted than children most liked by other boys and girls. This indicates that attempts to question the desirability of *displays* of extraverted behaviour would receive a measure of support. Such attempts, if successful, might reduce temptations to drink heavily in order to achieve the outward trappings of the extravert.

61. Although the heavier drinkers amongst the boys tended to perceive 'boys who drink a lot' as easy to get on with, most of the children perceived heavy drinkers as unsociable. This means that attempts to get children to consider some of the anti-social consequences of heavy drinking would not be rejected out of hand.

62. The heavier drinkers amongst the girls tended to perceive non-drinkers (and non-smokers) as having a 'holier-than-thou' attitude. Some non-drinkers may hold such an attitude. If so, health educators should attempt to lead them to reconsider this view. However, since most of the children did not perceive non-drinkers (or non-smokers) in this way, it seems that group pressures could be used to make drinkers more tolerant of non-drinkers and non-smokers.

63. Teachers who provide courses in social studies could introduce material related to the motivational influences underlying drinking (and smoking) into their classes. However, it seems that traditional methods of instruction are not



ideally suited to the task of raising children's awareness of the nature and dangers of oversimplified attitudes, beliefs and opinions. Rebellious children—children who stand to gain most from this kind of understanding—may be the least likely to benefit from traditional methods of instruction. For this reason it has been suggested that children should be given the opportunity of discussing their ideas, feelings and experiences in a non-threatening and relaxed atmosphere. Recommendations by Davies & Stacey and Jahoda & Crammond as to how discussion groups should be run are described and discussed.

### Health education for parents

64. Dight's study of Scottish drinking habits showed clear associations between earlier parental drinking practices and present consumption in older teenagers and adults. Since it is now much more the norm for mothers and fathers of young children to drink and as more young children are being introduced to alcohol in the parental home than in previous generations, it seems that the examples set by the present generation of parents of young children will be of even greater importance in determining the future behaviour of their offspring.

65. Some children drink in the absence of parents; those who do tend to drink more than those who drink only in the presence of parents. Parents should be aware of this. However, most 10- to 14-year-olds consume small amounts of alcohol in the presence of parents and most parents appear to control their children's consumption with due regard to age differences. Thus parents who themselves are heavy drinkers may be unable to see the link between their own behaviour and that of their children. It is important that they realise that the examples which they present are likely to influence the future behaviour of their children.

66. The best strategy seems to be to present ideas which are not too far removed from the point of view of the intended recipients. One approach might be to publicise the dangers (future perhaps more than present) which may accrue from irresponsible parental behaviour while extolling the positive features of the behaviour of many parents. Excessive emphasis on alcohol can be avoided by embedding alcohol-related messages within a wide-ranging series of messages concerned with the influence of parental models and attitudes on children's health and well-being.

67. Many parents may feel they can exert little influence on their children's behaviour outside of the home in the face of opposing pressures from their children's friends or from the mass media. Certain findings in the present study suggest that this view is unduly pessimistic. Thus parents should be encouraged to take an optimistic view.

68. The associations between higher levels of parental control and lower levels of drinking experience found in the present study should not be taken to mean that parents should forbid their children to drink. Parents who exert very strict controls over drinking run the risk of their children engaging in clandestine drinking activities. Such children typically consume more than those who drink in the company of parents.

69. Thus Davies & Stacey's suggestion that children should be introduced to the use of alcohol in the home has the ring of common sense about it. However, recommendations to this effect should not imply that *all* parents should do this. Suggestions that non-drinkers should introduce their children to alcohol are unwarranted. However, although health educators should respect the views of abstainers, non-drinkers should be aware that admonitions referring to the 'wickedness' of drinking, or to the 'evil' of alcohol may increase the probability that their children will use alcohol if they feel a need to reject parental authority.

#### Advertising

70. Davies & Stacey suggested that attempts should be made to bring advertisers to consider more carefully the dangers to young people of messages which associate alcohol consumption with toughness, sociability, attractiveness to the opposite sex, etc. Six years have elapsed since the publication of their report.

# 1 Introduction, method and sample

## 1.1 Introduction

The abuse of alcohol and other drugs by some teenagers has received considerable attention in the press and on TV and radio over recent years. Some of the evidence adduced has been anecdotal and its content alarmist; however, three empirically based trends do appear to give cause for concern.

There are indications from a variety of sources that the age at which young people begin to drink has been falling with successive generations (see, for example, Glatt, 1976). In a recent study of Scottish drinking habits commissioned by the Scottish Health Education Unit, Dight (1976) found that men and women aged 17-30 claimed to have tasted their first drink at 15.1 and 16.4 years, respectively; whereas the corresponding means for those aged 51 and over were 21.3 and 27.5 years. The mean ages at which they claimed to have begun normal drinking (as opposed to just tasting or trying drinks) followed a similar pattern. This information was obtained from retrospective questioning and cannot be taken entirely at face value. However, as Dight suggests, it is unlikely that such large differences can be accounted for entirely in terms of differential memory biases.

If more young people are beginning to drink at an earlier age then it seems likely that a greater number will be drinking more heavily than hitherto. We might therefore expect a corresponding increase in the number of young alcoholics. The vast majority of young people learn and continue to drink moderately, and alcoholism in teenagers is very rare. However, there is some evidence that the number of alcoholics in their twenties and thirties is increasing (Ritson, 1975; Glatt, 1976). This trend is particularly worrying for the prognosis of young alcoholics appears to be conspicuously poor (Ritson & Hassall, 1970).<sup>1</sup>

The increase of offences related to drunkenness over recent years appears to have been most rapid amongst the young. For example, the number of 14- to 17-year-olds convicted or found guilty of drunkenness offences in Scotland increased from 273 in 1966 to 445 in 1971. These figures are small in relative terms; however, reports from adults in regular contact with young people

<sup>1</sup> It has been suggested that young alcoholics (though by no means a homogeneous group) tend to be more emotionally disturbed than older alcoholics. However, if drinking is becoming more acceptable amongst the young then a larger number of non-neurotic young people may be drinking heavily and thereby putting themselves at risk. Therefore, if this trend continues, there will be increasing numbers of more stable personalities with relatively good prognosis amongst the young alcoholics of the future (Glatt, 1976).

suggest they considerably underestimate the real number of such offences (Flint, 1974).

Although the validity of each of these three main lines of evidence could be challenged, collectively they suggest a trend of increasing alcohol consumption and abuse amongst the young. Therefore there does seem good cause for the general concern expressed.

In response to this concern, the Scottish Health Education Unit commissioned two studies of the development of attitudes and behaviour related to drinking. Both investigations were conducted in Glasgow. Jahoda & Crammond's (1972) investigation of primary school children showed that few were naive with respect to alcohol. For example, the vast majority recognised the behavioural signs of drunkenness and most of the 8- and 10-year-olds were able to distinguish between alcoholic and non-alcoholic drinks. A surprising finding in this study was that the children's attitudes towards alcohol and drinking became increasingly negative over age groups representing the years 6 to 10; their declared intention to drink when older decreased over the same age span. On the other hand, the companion study of 14- to 17-year-olds (Davies & Stacey, 1972) showed that most adolescents drink at least occasionally. Taken together the results of these two investigations indicate that important changes in attitudes and behaviour related to alcohol occur between the ages of 10 and 14 (Jahoda & Crammond, 1972; Ritson, 1975). The study described here explores the nature of these changes.

## 1.2 Method

Two quite different methods were used in the previous developmental studies commissioned by the Scottish Health Education Unit. In the study of 6- to 10-year-olds, each child was tested with a series of game-like tasks. In the companion study, 14- to 17-year-olds completed group-administered questionnaires. Each of these methods has advantages when used with particular kinds of subjects or respondents. For example, game-like procedures are ideally suited for transforming young children's ideas into observable actions and for providing indirect measures of attitudes. Survey methods employing group-administered questionnaires can obtain detailed information from large samples of respondents equipped with the necessary skills. However, neither method was ideally suited for the present investigation. Although game-like tasks could be constructed for use with 10- to 14-year-olds, it would be difficult to devise procedures to obtain the kind of detailed information about drinking experiences and attitudes which was required. On the other hand, it would be difficult to design detailed questionnaires suitable for use with 10-year-olds. For these reasons, we decided to conduct individual interviews.

Interview techniques are, of course, prone to bias and error. However, these can be reduced by exercising care in the construction of interview schedules and by using skilled interviewers aware of the major sources of bias and alert to ambiguities and deception. The schedule used in the present study was developed and refined over several months of pilot work. The psychologist who conducted the interviews was a practised interviewer, with a wide experience of working with children. She was familiar with the purpose of the investigation, having helped develop the procedures during the last three months of pilot work.

The interview schedule contained formal questions requiring answers from

a given range of alternatives and open-ended questions which allowed the children to respond freely. In general, structured questions were used for administering batteries of attitude scales etc, which contained large numbers of items. For these questions, the ranges of alternative answers were presented on simple visual-aid cards. The informal open-ended questions covered areas like drinking experience and leisure activities where highly structured questions might have provided misleading information.

The pilot work indicated that interest and rapport was more easily maintained when questioning tactics were varied over the course of the interview. In the final schedule, open-ended questions followed each battery of formally constructed questions. Most of the children appeared to enjoy the changing nature of the interview and few showed signs of boredom. The open-ended questions were particularly well received—these were almost invariably taken as breaks for relaxed conversation. For this reason, the times taken to answer the questions varied considerably—from 45 to 75 minutes, depending on how talkative the children were.

A complete description of the schedule of questions and procedures is given in Appendix B. The rationale behind particular questions will be given in subsequent chapters. Here, it is sufficient to outline the major areas explored and the general structure of the interview:

- Perceived influence of the peer group
- Perceived parental control
- Leisure activities
- Drinking experience
- Smoking experience
- Perceived characteristics of children who drink
- Future leisure activities
- Moral judgements about drinking

### 1.3 Sample

A fully representative random sample was beyond our resources. For this reason a purposive sample was constructed with social class as the main variable. Three rough and approximate categories were used to describe school catchment areas: working-class (areas where council housing predominated); middle-class (areas where private housing predominated); and mixed working-/middle-class (areas where neither type of housing predominated). In all, eight areas were selected from the Central Region of Scotland: two working-class, two middle-class, and four mixed working-/middle-class areas.

The age groups chosen were 9<sup>3</sup>–10<sup>1</sup>, 11<sup>3</sup>–12<sup>1</sup> and 13<sup>3</sup>–14<sup>1</sup>. A total of 576 children was initially selected with a view to an eventual sample of 384. Equal numbers of boys and girls at each of the three age levels were selected from each of the eight areas. Apart from the constraints of area, age and sex, the children were sampled randomly from the class registers of the schools serving the areas.

A relatively large initial number was selected in order to allow for parental objections. However, circulars (Appendix A) sent out to the parents of each child giving details of the proposed investigation produced a very low refusal rate: only 25 parents (4 per cent<sup>1</sup> of the 576 contacted) refused to allow their children to take part. Only one child had to be replaced because of failure to

<sup>1</sup> Throughout the report percentages are rounded to the nearest whole number.

cope with the demands of the interview. The general structure of the sample is shown in Table 1.1.

Table 1.1 Sample design

Ages	Working-class areas		Mixed working-/middle-class areas		Middle-class areas	
	Boys	Girls	Boys	Girls	Boys	Girls
9 $\frac{3}{4}$ –10 $\frac{1}{4}$	16	16	32	32	16	16
11 $\frac{1}{2}$ –12 $\frac{1}{2}$	16	16	32	32	16	16
13 $\frac{3}{4}$ –14 $\frac{1}{4}$	16	16	32	32	16	16

## 2 Drinking experience

This chapter provides a description of drinking in five settings: in the parental home, in the home of an adult relative or friend of the parents, in the home of a friend of the child, in the open air, on licensed premises.

### 2.1 The measures of alcohol consumption

The amounts consumed when alcohol was last taken in each setting were coded in terms of the scale used by Davies & Stacey (1972).<sup>1</sup> The working equivalents—in terms of alcohol content—of the following amounts were given a score of one unit:

	Estimated amount of absolute alcohol (oz)
Pint of shandy .. .. .	0.40
Half-pint of beer .. .. .	0.40
Single measure of spirits .. .. .	0.40
Glass of wine .. .. .	0.45

Some children described their consumption in terms of half or quarter measures. However, those who consumed smaller amounts usually said they had no more than a sip or a taste. Such amounts are difficult to code in terms of alcohol units. For this reason, a value of 0.25 units (roughly equivalent to a quarter of a half-pint tumbler of beer) was taken as a minimum value for coding purposes.

This scaling system was also used to construct a Drinking Index. A score for each child was computed by summing the total number of units consumed across the five settings and dividing this sum by the number of settings in which the child had consumed 0.25 or more alcohol units.

As mentioned above, many children described their consumption only in terms of tastes or sips. As these descriptions could not be used to provide scores on the Drinking Index, the following categorisation procedure was used to divide the whole sample into three groups:

**Non-drinkers** were those who said they had never even tasted an alcoholic drink.

<sup>1</sup> Readers who require an account of the rationale behind this scaling procedure are referred to Appendix 1 of the report by Davies & Stacey.

**Tasters** were those who described their consumption only in terms of tastes or sips or who never mentioned consuming an amount equivalent to 0.25 or more alcohol units.

**Drinkers** were those who said they had consumed an amount equivalent to 0.25 alcohol units or more, on at least one occasion.

This categorisation procedure was used to construct an additional drinking scale. Non-drinkers, Tasters and Drinkers were given arbitrary scores of 1, 2 and 3 respectively. This ordinal scale will be referred to as the *Gross Drinking Scale*.

In summary, the *Drinking Index* provides an overall average measure of consumption for those children who said they had taken more than just a taste or a sip when they last had a drink in one or more of the five settings. The *Gross Drinking Scale* provides a categorisation system and an ordinal scale of drinking experience which differentiates Non-drinkers, Tasters and Drinkers.

## 2.2 Drinking experience

The first two questions referring to drinking were designed to discover how many children had any experience of drinking at all. Drinking experience was defined very liberally.

Q.27 'One of the things that we are interested in is what young people think about drinking beer, whisky or any other alcoholic drinks. Have you yourself ever tried anything like that?'

A follow-up question was put to those who answered 'no'.

Q.28 'By "tried" I don't mean necessarily a whole glass. It may have been just a sip. How about that?'

Experience of alcohol is widespread among children in the areas sampled. Eighty-seven per cent said they had tasted an alcoholic drink. There were no significant differences between the three age groups or between boys and girls in this respect. This figure does of course include many children whose drinking experience is minimal. This is shown in Table 2.1 in which the children who said they had tasted an alcoholic drink are categorised as Tasters or Drinkers. This subdivision was made in terms of information obtained from the open-ended questions described below. The number of Drinkers increases and the number of Tasters decreases uniformly with age. Thus the major age trend

Table 2.1 Number of Non-drinkers, Tasters and Drinkers

	Age					
	10		12		14	
	N	%	N	%	N	%
Non-drinkers	21	16	17	13	12	9
Tasters	48	38	43	34	24	19
Drinkers	59	46	68	53	92	72
	128	100	128	100	128	100

$X^2 = 18.78$ ;  $df = 4$ ;  $P < 0.001$ .



over these years appears to be related more to an increase in the amount consumed than to an increase in the number of children who are trying alcoholic drinks for the first time. The proportion who said they had never tried an alcoholic drink is small (13 per cent overall) and varies little with age.

### 2.3 The earliest remembrance of drinking

The first open-ended question about drinking was:

Q.29 'How old were you when you had your very first taste? Tell me about it. What happened?'

Most of the children were very forthcoming. In most cases, only an occasional prompt (for example, 'who was there?') was required to obtain an adequate picture of the occasion.

The ages at which the children said they had their first taste were subjected to an analysis of variance<sup>1</sup> (Table 2.2). Two of the main effects were significant. Table 2.3 shows the reported age when the first drink was taken increases with present age. In other words, the older children tended to say they had the first drink they could remember tasting at a later age than did the younger children. Secondly, although accounting for only a small proportion of the variance, the girls tended to claim they had taken their first taste when slightly older.

Table 2.2 Analysis of variance of reported ages when the first drink was taken

Source	SS	df	MS	F	P
Age (A)	619.33	2	309.66	93.75	0.001
Sex (B)	15.29	1	15.29	4.63	0.05
Catchment Area (C)	6.01	2	3.00	<1	NS
A × B	1.15	2	0.57	<1	NS
A × C	4.11	4	1.03	<1	NS
B × C	7.34	2	3.67	1.11	NS
A × B × C	26.20	4	6.55	1.98	NS
Within cell	1037.20	314	3.31		

Table 2.3 Means and standard deviations for reported age when the first drink was taken

	Age					
	10		12		14	
	Mean	SD	Mean	SD	Mean	SD
Boys	7.38	1.68	8.79	1.97	10.72	1.90
Girls	7.74	1.30	9.39	1.89	11.05	2.04

It is unlikely that the age effect represents a genuine association between the age at which the first drink was tasted and present age. Differential memory biases probably affected many reports. It is also possible that older children are less willing to admit to what may appear (to them) to be precocious drinking activities.

<sup>1</sup> All of the analyses of variance reported here were carried out according to the Classic Experimental Design described by Kim & Kohout (1975).

There appear to be at least three plausible explanations for the sex difference. First, girls may be less willing than boys to admit to 'precocious' drinking activities. Second, boys may be more curious than girls about drinking and may therefore be more likely to ask to try a drink. Third, the sex effect may reflect differences in the way parents introduce boys and girls to alcohol. These issues could be resolved by longitudinal studies with children and parents.

Davies & Stacey (1972) found a positive correlation between age at which the first drink was taken and current consumption. In other words, teenagers who said they were introduced to alcohol at a relatively early age tended to report lower levels of consumption. In the present study, correlations between the age at which the first drink was taken and the Drinking Index were not significant. These correlations were computed for boys and girls separately and for boys and girls combined.

Most of the children said the first drink they could remember tasting was given to them in the parental home (72 per cent) or in the home of an adult relative or friend of the parents (19 per cent). Seventy-two per cent said that this occurred on a special occasion, such as a Christmas, New Year or birthday party. The three most frequently mentioned sources of the drink were father (53 per cent), an adult other than a parent (17 per cent) and mother (15 per cent). In 94 per cent of the cases one or both parents were present. Thus it seems clear that the overwhelming majority of the children were introduced to alcohol with at least the tacit approval of their parents.

Table 2.4 First drink: Type and gross amount consumed

	Amount	
	Only a taste	More than a taste
Shandy or cider	19	36
Beer or lager	108	39
Stout (Guinness, Mackeson, etc)	4	6
Whisky	16	6
Other spirits	13	4
Fortified wine	20	9
Table wine	13	6
Other drinks (Martini, Advocaat, etc)	22	26

The various kinds of drinks consumed are set out in Table 2.4. Two major features are apparent in this table. First, more than half said that the first experience of drinking was with drinks of relatively low alcoholic content; for the remainder, no one particular kind of drink predominated. Secondly, a majority reported taking only a taste or very small amount, the most notable exceptions to this being those who tried shandy/cider or 'other drinks'.

## 2.4 The last drink

The second open-ended question referring to drinking was:

Q.30 'When was the last time you had some? What happened? Tell me about that'.

After the child had talked about the last drink the interviewer asked if he (she) had ever had a drink elsewhere. Children who said they had were asked to say something about the last time they had a drink in each of the places mentioned. In this way information was obtained about the last time the children had a drink in one or more of five settings.

(a) *The last drink in the parental home*

Seventy-six per cent (88 per cent of those who had tried an alcoholic drink) said they had been given or had taken a drink at home. Fifty-eight per cent of these children said they were given the drink by the father, 18 per cent by the mother and 10 per cent said they were given a drink by some other adult. In 95 per cent of the cases a parent was present.

Table 2.5 gives a breakdown of the drinks consumed. Further analysis of the data subsumed in this table revealed two major age- and sex-related trends. Table 2.6 shows that the proportion of children who said they only had a taste decreased with age. The second part of this table shows that more girls than boys said they only had a taste on this occasion. Secondly, the proportion who had stronger drinks (drinks other than shandy/cider, beer/lager, stout) increased with age (Table 2.7). Here a greater proportion of girls said they had a stronger drink. Further analysis showed that this occurred because more girls than boys (26/142 versus 12/151,  $P < 0.01$ ) said they tasted or had more than a taste of drinks classified as 'other drinks' whereas more boys than girls (27/151 versus 9/142,  $P < 0.01$ ) said they had taken more than a taste of beer or lager.

The third part of Table 2.7 shows an association between strength of drink and catchment area. Here, separate analyses of the drinks listed in Table 2.5 indicated that this association reflects social class differences in the use of non-fortified wine: 1, 9 and 16 children from the working-, mixed- and middle-class catchment areas said they had table wine on this occasion.

Table 2.8 shows the results of an analysis of variance<sup>1</sup> of the alcohol units consumed by children who had more than a taste. Only the age effect is significant. Table 2.9 shows that consumption increased with age.

Table 2.5 Last drink at home: Type and gross amount consumed

	Amount	
	Only a taste	More than a taste
Shandy or cider	13	42
Beer or lager	87	36
Stout (Guinness, Mackeson, etc)	2	5
Whisky	13	7
Other spirits	20	5
Fortified wine	15	12
Table wine	7	19
Other drinks (Martini, Advocaat, etc) 18		20

<sup>1</sup> The alcohol unit and Drinking Index data were subjected to a log transformation to reduce heterogeneity of variance prior to each of the parametric analyses of these data described in this report.

Table 2.6 Last drink at home: Gross amount consumed

	Age			Sex	
	10	12	14	Boys	Girls
Only a taste	63	57	38	70	88
More than a taste	33	44	58	81	54
	96	101	96	151	142

Age differences:  $X^2 = 13.49$ ;  $df = 2$ ;  $P < 0.01$ .

Sex differences:  $X^2 = 7.18$ ;  $df = 1$ ;  $P < 0.01$ .

Table 2.7 Last drink at home: Strength of drink consumed

	Age			Sex	
	10	12	14	Boys	Girls
Weak only	65	58	44	97	70
Strong only	29	39	45	49	64
Both types	2	4	7	5	8
	96	101	96	151	142

Social class			
	Working	Mixed	Middle
Weak only	47	87	33
Strong only	24	50	39
Both types	0	10	3
	71	147	75

Age differences\*:  $X^2 = 9.38$ ;  $df = 2$ ;  $P < 0.01$ .

Sex differences\*:  $X^2 = 6.67$ ;  $df = 1$ ;  $P < 0.01$ .

Social class differences\*:  $X^2 = 7.91$ ;  $df = 2$ ;  $P < 0.05$ .

\*Weak versus the rest.

Table 2.8 Last drink at home: Analysis of variance of alcohol units consumed

Source	SS	df	MS	F	P
Age (A)	0.75	2	0.37	3.34	0.05
Sex (B)	0.00	1	0.00	<1	NS
A $\times$ B	0.38	2	0.19	1.72	NS
Within cell	14.39	129	0.11		

Table 2.9 Last drink at home: Means and standard deviations for alcohol units consumed

Age					
10		12		14	
Mean	SD	Mean	SD	Mean	SD
0.80	0.74	0.87	0.54	1.40	1.43

Table 2.10 Last drink at home: Occasion

	Age		
	10	12	14
Special	45	72	64
Not special	51	29	31
(No recollection)	(0)	(0)	(1)
	96	101	96

$\chi^2 = 14.18$ ;  $df = 2$ ;  $P < 0.001$ .

Sixty-two per cent of the children said they had their last drink at home on a special occasion. Table 2.10 shows that a greater proportion of 12- and 14-year-olds said that this was so. At first sight this finding is surprising. Perhaps the reason lies in the age-related trends in consumption described above. It is possible that many parents allow younger children a taste of a relatively weak alcoholic drink on occasions which are not special in any way. However, when dealing with older children, who are often given more than just a taste, parents may be less willing to allow drinking on non-special occasions.

(b) *The last drink in the home of an adult relative or friend of the parents*

Thirty-six per cent (41 per cent of those who had tried an alcoholic drink) said they had been given a drink in this setting. The three most frequently reported sources of drink on the last occasion when this occurred were an adult other than a parent (63 per cent), father (17 per cent) and mother (7 per cent). The father was more frequently said to be the source of the drink by boys than by girls (17/70 versus 6/67,  $P < 0.05$ ). In most cases a parent (66 per cent) or an adult other than a parent (26 per cent) was present.

Table 2.11 Last drink in the home of an adult relative etc: Type and gross amount consumed

	Amount	
	Only a taste	More than a taste
Shandy or cider	3	28
Beer or lager	20	13
Stout (Guinness, Mackeson, etc)	4	1
Whisky	8	6
Other spirits	7	5
Fortified wine	8	7
Table wine	4	3
Other drinks (Martini, Advocaat, etc)	8	22

Table 2.11 gives a breakdown of the drinks consumed. Further analysis of the data subsumed in this table revealed three features of interest. First, about half of the children said they had a drink of relatively strong alcoholic content. Second, more than half (80/137,  $P < 0.05$ ) said they had more than a taste on this occasion. Third, more girls than boys (22/67 versus 8/70,  $P < 0.01$ ) said



they had a taste or more than a taste of drinks classified as 'other drinks'.

There was no indication of an age-related trend in the proportion of children who had more than a taste or in the proportion who had relatively stronger drinks (drinks other than shandy/cider, beer/lager or stout). However, an analysis of variance of the alcohol units consumed (Table 2.12) shows that consumption varied with age for those who had more than a taste on this occasion. Table 2.13 shows that consumption increased with age.

Table 2.12 Last drink in the home of an adult relative etc: Analysis of variance of alcohol units consumed

Source	SS	df	MS	F	P
Age (A)	1.54	2	0.77	5.80	0.01
Sex (B)	0.05	1	0.05	<1	NS
A $\times$ B	0.01	2	0.00	<1	NS
Within cell	9.81	74	0.13		

Table 2.13 Last drink in the home of an adult relative etc: Means and standard deviations for alcohol units consumed

Age					
10		12		14	
Mean	SD	Mean	SD	Mean	SD
0.76	0.63	0.94	1.00	1.88	2.44

Table 2.14 Last drink in the home of an adult relative etc: Occasion

	Age		
	10	12	14
Special	21	40	37
Not special	18	6	9
(No recollection)	(2)	(2)	(2)
	41	48	48

$X^2 = 13.47$ ;  $df = 2$ ;  $P < 0.01$ .

Most (72 per cent) of the children said they had this drink on a special occasion (Table 2.14). More 12- and 14-year-olds said that this was so. This finding is similar to that described in the previous section. However, in this case an additional explanation seems equally plausible: younger children may be more likely to visit relatives and friends of the parents on occasions which are not special.

*(c) The last drink in the home of the child's friend*

Only 17 children said they had taken a drink in this setting; therefore, the base for the following brief description is very small. Fifteen were 14-year-olds (12 per cent of the children in this age group). Various kinds of drinks were consumed and no one particular kind predominated. Fourteen children had more than just a taste.

The children's comments indicated that drinking in a friend's home is often a clandestine activity. Only 3 of them were given their last drink in this setting by an adult, and in only one case was a parent present.

*(d) The last drink in the open air*

Only 24 children said they had taken a drink in the open air. Five were 10-year-olds, 5 were 12-year-olds and 14 were 14-year-olds. Nineteen were boys and 5 were girls.

Nineteen said their last drink in the open air was not taken on a special occasion. However, for about half of them this was not a clandestine activity: in 9 cases a parent and in 4 some other adult was present, in most cases on a picnic or outing where relatively small amounts of shandy, beer or lager were consumed. Ten of the 11 children who had their last drink in the open air in the company of other children only were 14-year-olds. Here consumption was clandestine and varied considerably—from sips of beer to a cup of vodka and half a bottle of cheap fortified wine. Parks, countryside and 'down the street' were most often mentioned as venues.

*(e) The last drink on licensed premises*

Twenty-one per cent (24 per cent of those who had tried an alcoholic drink) said they had taken a drink in this setting. This proportion did not vary significantly with age or catchment area; however, a slightly greater proportion of girls (29 per cent) than boys (19 per cent) said they had done so ( $P < 0.05$ ). The three most frequently mentioned sources of the last drink in this setting were father (54 per cent), an adult other than a parent (20 per cent) and mother (10 per cent). In 85 per cent of the cases a parent was present.

A slightly greater number (48/80 or 60 per cent) said the occasion for the

Table 2.15 Last drink on licensed premises: Type and gross amount consumed

	Amount	
	Only a taste	More than a taste
Shandy or cider	3	26
Beer or lager	8	9
Stout (Guinness, Mackeson, etc)	0	0
Whisky	3	4
Other spirits	1	3
Fortified wine	1	3
Table wine	3	8
Other drinks (Martini, Advocaat, etc)	6	7

Table 2.16 Last drink on licensed premises: Gross amount consumed

	Age		
	10	12	14
Only a taste	11	7	4
More than a taste	12	19	27
	23	26	31

$X^2 = 8.08$ ;  $df = 2$ ;  $P < 0.05$ .

Table 2.17 Last drink on licensed premises: Strength of drink consumed

	Age			Sex	
	10	12	14	Boys	Girls
Weak only	16	16	11	22	21
Strong only	7	9	19	11	24
Both types	0	1	1	0	2
	23	26	31	33	47

Age differences\*:  $X^2 = 7.11$ ;  $df = 2$ ;  $P < 0.05$ .

Sex differences\*:  $X^2 = 3.77$ ;  $df = 1$ ;  $P = 0.05$ .

\*Weak versus the rest.

last drink was not special in any way, although this difference is of marginal significance only ( $P < 0.1$ ). The venues mentioned were: hotel (39 per cent), public house (23 per cent), club (20 per cent) and restaurant (18 per cent).

Table 2.15 gives a breakdown of the drinks consumed. Further analysis of the data subsumed in this table revealed three general trends. The proportion of children who had more than a taste (Table 2.16) and the proportion who consumed drinks of relatively high alcoholic content (Table 2.17) increased with age. The second part of Table 2.17 shows that a greater proportion of girls than boys consumed drinks of relatively high alcoholic content. Separate analyses of each of the drinks categorised in Table 2.15 showed that this occurred mainly because more boys than girls consumed beer or lager (12/33 versus 5/47,  $P < 0.01$ ); and more girls than boys consumed drinks classified as 'other drinks' (11/47 versus 2/33,  $P < 0.05$ ).

Table 2.18 shows the results of an analysis of variance of the alcohol units consumed by those who had more than a taste on the last occasion. The age and sex effects are significant. Table 2.19 shows consumption increased with age and boys tended to consume more than girls.

Table 2.18 Last drink on licensed premises: Analysis of variance of alcohol units consumed

Source	SS	df	MS	F	P
Age (A)	1.74	2	0.87	7.87	0.001
Sex (B)	0.46	1	0.46	4.14	0.05
A $\times$ B	0.25	2	0.12	1.12	NS
Within cell	5.74	52	0.11		



Table 2.19 Last drink on licensed premises: Means and standard deviations for alcohol units consumed

	Age					
	10		12		14	
	Mean	SD	Mean	SD	Mean	SD
Boys	0.63	0.69	0.98	0.40	4.36	7.52
Girls	0.58	0.34	0.75	0.58	1.18	0.77

## 2.5 The presence of parents as an influence on drinking

It is clear from the descriptions given in the preceding sections that parents were often present when the children last had a drink in the open air or on licensed premises. Although drinking in the home of a friend typically occurred in the absence of parents, the number of children who said they had engaged in this activity was small. Of the 102 children who said they had taken a drink outside of the parental home or the home of an adult relative or friend of the parents, only 32 said they had done so without a parent being present. Table 2.20 shows that 25 of these children were 14-year-olds (20 per cent of the children in this age group).

When the last drinks in all five settings are considered, a larger number (70) said that they had taken a drink on one or more occasions in the absence of parents. More 14-year-olds (29 per cent of the children in this age group) said they had done so (Table 2.21).

Table 2.20 Number of children who said they have taken a drink outside the parental home or the home of adult relatives or friends of the parents

	Age		
	10	12	14
Only in the presence of parents	25	25	20
At least once in the absence of parents	3	4	25
	28	29	45

$$X^2 = 21.94; df = 2; P < 0.001.$$

Table 2.21 Number of children who said they have taken a drink in the presence/absence of parents

	Age		
	10	12	14
Only in the presence of parents	90	95	78
At least once in the absence of parents	17	16	37
(No recollection)	(0)	(0)	(1)
	107	111	116

$$X^2 = 13.23; df = 2; P = 0.001.$$

Table 2.22 shows the number of Tasters and Drinkers among children who said they had taken all of their last drinks in the presence of a parent (Parent Present group) and among children who said they had taken one or more of these drinks in the absence of parents (Parent Absent group). The Parent Present group contains a greater proportion of children classified as Tasters.

The results of an analysis of variance of the Drinking Index scores are shown in Table 2.23 and the relevant mean consumption scores in Table 2.24. Consumption increases with age and at each age the Parent Present group has a lower level of consumption than the Parent Absent group. Thus children who said they had taken a drink in the absence of their parents tended to report higher average levels of consumption.

Table 2.22 Number of Tasters and Drinkers who said they have taken a drink in the presence/absence of parents

	Gross drinking category	
	Tasters	Drinkers
Only in the presence of parents	101	162
At least once in the absence of parents (No recollection)	14 (0)	56 (1)
	115	219

$\chi^2 = 7.49$ ;  $df = 1$ ;  $P < 0.01$ .

Table 2.23 Analysis of variance of the Drinking Index scores\*

Source	SS	df	MS	F	P
Absence/Presence of Parents	0.46	1	0.46	4.63	0.05
Age	1.81	2	0.90	9.02	0.001
Sex	0.05	1	0.05	<1	NS
Catchment Area	0.16	2	0.08	<1	NS
Within cell	16.73	167	0.10		

\*This summary table has been abbreviated. None of the interaction terms approached significance.

Table 2.24 Means and standard deviations of the Drinking Index scores

	Age					
	10		12		14	
	Mean	SD	Mean	SD	Mean	SD
Parent Present group	0.70	0.50	0.82	0.47	1.18	0.95
Parent Absent group	0.85	0.47	0.90	0.67	2.09	2.27

The Parent Present/Parent Absent dichotomy was also related to two of the variables referred to in the description of the first remembrance of drinking. Tables 2.25 and 2.26 show that a greater proportion of children in the Parent Present group received their first drink from parents or in the presence of parents.

However, further analysis showed there was no significant difference between the two groups in terms of the place where the first drink was taken. Most of the children in each group had their first drink in the parental home. Thus the differences between the two groups cannot be explained simply in terms of the presence or absence of alcohol in the home.

Table 2.25 Number of children who said they have taken a drink in the presence/absence of parents classified according to the source of the first drink

	Source			
	Parent	Other adult	Child	(No recollection)
Parent present	194	40	26	(3)
Parent absent	34	16	19	(1)
(No recollection)	(1)	(0)	(0)	(0)
	229	56	45	(4)

$$X^2 = 19.26; df = 2; P < 0.001.$$

Table 2.26 Number of children who said they have taken a drink in the presence/absence of parents classified according to people present when the first drink was taken

	People present			
	Parent	Other adult	Children only	(No recollection)
Parent present	259	3	1	(0)
Parent absent	53	4	12	(1)
(No recollection)	(1)	(0)	(0)	(0)
	313	7	13	(1)

$$X^2 = 45.33; df = 1; P < 0.001.$$

## 2.6 Summary and discussion

Experience of alcohol is widespread among 10- to 14-year-olds in the areas sampled. Nine out of 10 said they had tasted an alcoholic drink. This proportion—which did not vary significantly with age, sex or catchment area—corresponds with Dight's (1976) estimate of the proportion of drinkers among Scottish men and women who are parents of young children.

However, there were marked age differences in alcohol consumption. The number of children who never mentioned taking more than a sip or a taste (Tasters) decreased with age. The average amount consumed (as measured by the Drinking Index) by children who said they had taken more than a taste (Drinkers) increased with age. Although the average amount consumed was lower, this age-related increase was steeper and more dramatic than that reported by Davies & Stacey (1972) in the study of 14- to 17-year-olds.<sup>1</sup>

<sup>1</sup>Correlations reported by Davies & Stacey show that the proportions of variance in amounts consumed accounted for by the age variable were 1 per cent for boys and even less than this for girls. In the present study, the results described in Chapter 7 show that the age variable accounts for 13 per cent and 7 per cent of the variance in Drinking Index scores for boys and girls respectively.

The general picture obtained from the children's descriptions of the first drink they could remember tasting is similar in many respects to Jahoda & Crammond's (1972) account of early drinking experiences in 6- to 10-year-olds. Most of the children said the first drink, usually just a taste or a sip, was taken on a special occasion in the parental home. The father was the most frequently mentioned source of the drink. Thus it seems clear that most of the children were introduced to alcohol with at least the tacit approval of their parents.

The age when the 'first drink' was taken increased with present age. This suggests that many of the children found difficulty in remembering when they really first tasted an alcoholic drink. Although there was no indication of a widespread defensive reaction to the questions about drinking, it is possible that some of the children were unwilling to admit to trying drinks at an early age. For these reasons, data reported in studies which use retrospective questioning techniques should not be taken entirely at face value. As Jahoda & Crammond suggest, it seems likely that most children are given small quantities of alcohol in the parental home during the early years of primary school.

Davies & Stacey found a positive correlation between the age when the first drink was taken and current consumption. In other words, teenagers who reported that they were introduced to alcohol at a relatively early age tended to report lower levels of consumption. This finding has been used as a basis for suggesting that children should be introduced to alcohol at an early age. However, some researchers have reported *negative* associations between the age when the first drink was taken and current consumption (Blum, 1969; Dight, 1976). In the present study there was no relationship between these two variables.

The girls tended to report a later age when the first drink was taken. There are several possible explanations for this. However, as the girls tended to be given smaller amounts of alcohol in the two settings where parents (especially the father) were more active in supplying the drinks (in the parental home and on licensed premises) explanations in terms of differences in the way parents introduce children to alcohol may seem more plausible. It is worth noting in this context that more boys than girls were given drinks by the father in the home of an adult relative or friend of the parents; in this setting parents were generally less active in supplying drinks.

Apart from these findings, there were few differences between the reports given by boys and girls. Although the boys showed a greater 'preference' for beer or lager and more girls than boys consumed drinks like Martini and Advocaat, there were no differences between the proportions of boys and girls classified as Non-drinkers, Tasters and Drinkers, and no differences in the average amounts consumed (as measured by the Drinking Index) by boys and girls classified as Drinkers. It is worth noting here that Davies & Stacey and Jahoda & Crammond found that more girls than boys had never tasted an alcoholic drink. Although these researchers used completely different questioning procedures to those used in the present study—and the differences reported by Davies & Stacey were very small—it is possible that sex differences in drinking patterns amongst the young have decreased over recent years.

Seventy-six per cent mentioned taking a drink in the parental home. On the last occasion when this occurred, drinking appears to have been closely controlled by parents: most 10-year-olds said they were given tastes or sips and drinks of relatively low alcoholic content; thereafter, the amount and alcoholic content of drinks consumed increased with age. As with the first drink, the father was most often mentioned as the source.

More 12- and 14-year-olds than 10-year-olds said they had the last drink at home on a special occasion. The most plausible explanation for this seems to be that many parents allow young children a sip or a taste on occasions which are not special, but exert more control over the larger amounts consumed by 12- and 14-year-olds by limiting drinking in the home to special occasions. This particular control is probably a temporary measure. Drinking in the home on non-special occasions appears to increase in frequency as young people approach the age of 18 (Davies & Stacey, 1972).

Thirty-six per cent said they had taken a drink in the home of an adult relative or friend of the parents. The amount consumed by children who had more than a taste on the last occasion when this occurred increased with age. However, there were no age differences in the numbers given more than a taste or in the numbers given relatively stronger drinks. The majority had more than a taste. Although often present, parents were less actively involved in giving drinks to their children.

Twenty-one per cent said they had been given a drink on licensed premises. Surprisingly, this proportion did not vary with age. Furthermore, the main trends in consumption were similar to those for the last drink in the parental home.

More 14-year-olds mentioned drinking in a friend's home or in the open air. Twelve per cent of the children in this age group said they had taken a drink in a friend's home, and 11 per cent mentioned drinking in the open air. More boys than girls said they had taken a drink in the open air.

The proportions of 14-year-olds who said they had taken a drink in a friend's home or in the open air are considerably smaller than those reported by Davies & Stacey in the Glasgow study and by McKechnie *et al* (1977) in a recent study of 14- and 15-year-olds in Dumfries. Although there was no indication of a widespread defensive reaction to the questions about drinking, it seems likely that some of the children were unwilling to admit to drinking in these settings. In the investigations conducted by Davies & Stacey and by McKechnie *et al* the adolescents completed anonymous questionnaires. This kind of procedure probably encourages children to be more forthright. However, anonymous self-completion methods are unsuitable for 10-year-olds (and perhaps for many 12-year-olds too) when detailed information is required. It is worth noting in this context that McKechnie *et al* found that many of their 14- and 15-year-olds were unable to cope with detailed questions about amounts consumed in various places.

Eighteen per cent of the children mentioned drinking in the absence of parents. A greater proportion of these were 14-year-olds. Twenty-nine per cent of the children in this age group said they had taken a drink on one occasion or more in the absence of parents.

Children who said they had taken a drink in the absence of parents tended to report higher levels of alcohol consumption than those whose parents were present on each of the occasions when they last had a drink in one or more of the five settings. The former group contained a greater proportion of children who obtained the first drink they could remember tasting from a source other than a parent.

### 3 Correlates of drinking

This chapter presents a variety of different kinds of information. The first section provides a brief summary of the relationships between drinking and social class, and the second a summary of the relationships between drinking and smoking. The third section describes leisure activities, and the fourth examines associations between alcohol consumption/smoking experience and the extent to which the children said they envied older teenagers.

#### 3.1 Social class

The scores on the two drinking scales were not associated with social class—whether defined in terms of catchment area or father's occupation as classified by the Registrar General's categories. Neither were the scores related to whether or not the child intended to stay on at school after the statutory minimum leaving age, or to whether or not the mother was a full-time housewife. (The information used to provide measures of social class, etc, was obtained from Questions 1, 2 and 3.)

#### 3.2 Smoking experience

The initial pilot work indicated that questions about smoking—however phrased—embarrass many 10- to 14-year-olds. In the main study, brief questions about smoking were asked in an offhand manner—as if asides from the major topics of interest. The interviewer then moved on, almost without pause, to less disquieting matters.

Q.34 'We are also interested in what young people think about smoking. Have you ever tried a cigarette?'

An additional question was put to those who answered 'no'.

Q.35 'By "tried" I don't necessarily mean a whole cigarette. It may have been just a puff or two. How about that?'

Several children were embarrassed by even these brief questions, despite the generally good rapport. No further questions about smoking were put to those who answered 'no'. However, those who answered 'yes' to either were asked:

Q.36 'Have you smoked more than one cigarette?'

Finally, those who answered 'yes' to this were asked:

Q.37 'About how many do you smoke now?'

Few children (4 per cent overall) said they were current smokers. However,

larger proportions said they had smoked more than one (15 per cent) and/or that they had tried smoking a cigarette (39 per cent). The breakdown in Table 3.1 shows a highly significant increase in smoking experience with age.

Table 3.1 Smoking experience

	Age					
	10		12		14	
	N	%	N	%	N	%
Has never tried a cigarette	98	77	84	66	54	42
Has tried a cigarette	26	20	31	24	35	27
Has smoked more than one	4	3	11	9	25	20
Smokes now	0	0	2	2	14	11
	128	100	128	100	128	100

$\chi^2 = 52.82$ ;  $df = 6$ ;  $P < 0.001$ .

Table 3.2 Smoking experience by intention to stay on at school

	Intends to stay on at school	Does not intend to stay on at school	(Don't know)
Has never tried a cigarette	118	117	(1)
Has tried a cigarette	40	52	(0)
Has smoked more than one	11	29	(0)
Smokes now	2	14	(0)
	171	212	(1)

$\chi^2 = 14.45$ ;  $df = 3$ ;  $P < 0.01$ .

There were no significant differences between boys and girls. Furthermore, smoking experience was not associated with social class—whether defined in terms of catchment area or father's occupation. Neither was it related to whether or not the mother was a full-time housewife. However, Table 3.2 shows that a greater proportion of children who said they intend to leave school at 16 admitted to more experience of smoking.

Several researchers have reported positive associations between measures of drinking and smoking in older teenagers and adults (for example, Davies & Stacey, 1972; Dight, 1976). In order to discover whether or not such a relationship held in the present study an ordinal *Smoking Experience Scale* was constructed by assigning values of 1 to 4 to responses labelled by the categories 'has never tried . . .' to 'smokes now' defining the rows of Tables 3.1 and 3.2. For boys, a Kendall rank correlation coefficient of 0.24 ( $P < 0.001$ ) was obtained between scores on the Smoking Experience and Gross Drinking scales, and a correlation of 0.14 ( $P < 0.05$ ) between scores on the Smoking Experience Scale and the Drinking Index. The correlations for girls were 0.23 ( $P < 0.001$ ) and 0.33 ( $P < 0.001$ ) respectively.

### 3.3 Leisure activities

Davies & Stacey's study of teenagers found that heavier drinkers were more likely to engage in group activities, such as going to dances and parties. The present study included two open-ended questions about spare-time activities. The first was concerned with present leisure activities.

Q.24 'What kind of things do you do in your spare time?'

A content analysis of the answers revealed associations between three spare-time activities and scores on one or other of the two drinking scales. Thirty-one per cent mentioned church-related activities, 17 per cent mentioned organised group activities and 9 per cent mentioned discos or dances. The first three rows of Table 3.3 give correlations between mentions of these activities and scores on the drinking and smoking scales. The correlations are small. However, in general, children who mentioned organised group activities and discos tended to report higher levels of alcohol consumption and smoking experience; children who mentioned church activities tended to report lower levels. These activities are more closely associated with scores on the Gross Drinking Scale than with scores on the Drinking Index.

Table 3.3 Kendall rank order correlations between present/future leisure activities and alcohol consumption/smoking experience

	Gross Drinking Scale		Drinking Index		Smoking Experience Scale	
	Boys (N=192)	Girls (N=192)	Boys (N=112)	Girls (N=91)	Boys (N=192)	Girls (N=192)
<i>Present activities</i>						
Organised groups	0.12*	NS	NS	0.23†	0.12*	0.16†
Discos	0.12*	0.20†	NS	NS	NS	0.28‡
Church	-0.13*	-0.14*	NS	NS	-0.12*	-0.19†
<i>Future activities</i>						
Licensed premises	0.15*	0.19†	NS	0.16*	0.18†	0.21‡
Discos	0.17*	0.18†	NS	NS	NS	0.20†
Church	NS	-0.14*	-0.15*	NS	-0.14*	-0.15*

\* $P < 0.05$ .

† $P < 0.01$ .

‡ $P < 0.001$ .

The infrequent mention of visits to discos as a spare-time activity is not surprising given the age range sampled. However, the answers given to the second open-ended question indicate that many 10- to 14-year-olds intend to visit discos when they are older.

Q.46 '... What kind of things do you think you'll do when you've left school?'

Content analysis of the answers to this question revealed three activities associated with alcohol consumption. Thirty-two per cent mentioned discos or dances as a future leisure activity, 21 per cent mentioned church activities and 13 per cent mentioned visiting licensed premises. Rows four to six in Table 3.3. show that higher levels of alcohol consumption and smoking experience are associated with more frequent mentions of licensed premises and discos and less frequent mentions of church activities. As with current leisure activities,



the correlations are small, and associations with the Gross Drinking Scale tend to be higher than associations with the Drinking Index.

### 3.4 Envy of older teenagers

The initial pilot work indicated that many 10- to 14-year-olds envy the greater freedom enjoyed by older teenagers.

Q.26 'What about things older boys (girls) can do—those who have left school Is there anything you envy them for—that you'd like to be able to do now?'

Table 3.4 shows a greater proportion of children classified as Drinkers said they envied older teenagers, whereas a greater proportion of Non-drinkers said they did not; Tasters were evenly balanced.<sup>1</sup>

Content analysis revealed four main reasons for the expression of envy. Forty-one per cent said they would like more freedom, 22 per cent said they would like to work, 9 per cent expressed a desire to be bigger or stronger (in most cases to be better at sports) and 8 per cent said they would like to have more money. Correlations between expressions of these wishes and scores on the drinking and smoking scales are shown in Table 3.5. The correlations range

Table 3.4 Gross drinking category by expressed envy of older teenagers

	Envies older teenagers	Does not envy older teenagers
Non-drinkers	15	35
Tasters	55	60
Drinkers	128	91
	198	186

$$X^2=14.11; df=2; P<0.001.$$

Table 3.5 Kendall rank order correlations between expressed envy of older teenagers and alcohol consumption/smoking experience

	Gross Drinking Scale		Drinking Index		Smoking Experience Scale	
	Boys (N=192)	Girls (N=192)	Boys (N=112)	Girls (N=91)	Boys (N=192)	Girls (N=192)
Would like to work	0.12*	0.14*	NS	0.17*	0.11*	0.15*
Would like more money	NS	NS	NS	0.22†	NS	0.13*
Would like more freedom	0.36‡	0.15*	NS	0.25†	0.19†	0.22‡
Would like to be bigger or stronger	NS	NS	-0.18*	NS	NS	-0.12*

\* $P < 0.05$ .

† $P < 0.01$ .

‡ $P < 0.001$ .

<sup>1</sup> The children were also asked whether or not they would like to be older (Question 48). The data obtained from this question will not be presented here since they merely support the trend shown in Table 3.4. Although most children said they were happy with their present age, relatively more Drinkers than Non-drinkers said they would like to be older; the Tasters again occupied the middle position.

from low to moderate. Higher alcohol consumption (on one or both scales) and smoking experience are positively associated with the expression of each kind of wish except for a desire to be bigger or stronger. Boys who said they would like to be bigger or stronger tend to have lower scores on the Drinking Index; girls who expressed a similar wish tend to have lower scores on the Smoking Experience Scale. The positive correlations between the Drinking Index and the reasons for envy are higher for the girls than for the boys.

### 3.5 Discussion and summary

Jahoda & Crammond (1972) found no relationship between 6- to 10-year-olds' intentions to drink when older and social class as measured by school catchment area. In the companion study of 14- to 17-year-olds, Davies & Stacey (1972) found a *small* positive correlation between amount consumed and low occupational status of parents *for boys only*. The patterns described by Dight (1976) in her study of adult Scots were more complicated. Among regular drinkers, manual workers of *both sexes* reported higher levels of consumption than other occupational groups. However, this difference was considerably more pronounced among men than among women. Male manual workers aged 17-30 reported the highest consumption levels of all.

In the present study, consumption was not associated with social class. This finding, taken in conjunction with the trends described above indicates: (1) that the social class differences described by Dight begin to emerge between 14 and 17 years; and (2) that these differences emerge earlier in boys than in girls.

At this point a note of caution should be entered. The 14- to 17-year-olds were sampled from schools and colleges. It is possible that Davies and Stacey would have found a stronger relationship between alcohol consumption and social class if they had included teenagers who were unemployed or in unskilled or semi-skilled occupations.

Smoking experience increased with age; however, the prevalence figures for current smokers are less than those expected on the basis of results obtained from studies in which children and teenagers completed anonymous questionnaires (for example, Bynner, 1969; Davies & Stacey, 1972; Rawbone *et al*, 1977). As Bynner suggests, anonymous self-completion methods probably encourage children to admit to being smokers. Certainly, in our experience, face-to-face questions about smoking tend to elicit considerably more embarrassment and anxiety in 10- to 14-year-olds than questions about drinking.

Although the smoking prevalence figures are almost certainly underestimates, the absence of a sex difference is consistent with suggestions that differences between smoking rates among boys and girls have decreased over recent years. For example, Rawbone *et al* (1977) suggest that smoking rates among secondary school boys have fallen; however, among girls, there has been little change, or possibly a slight increase, so that the difference between the sexes is smaller than hitherto. They suggest that this may be associated with changes in attitudes towards sexual equality. This issue will receive further consideration in Chapter 8.

There was no indication of a relationship between smoking and social class as defined by catchment area or father's occupation. However, a greater proportion of children who said they intend to leave school at 16 admitted to more experience of smoking. If we assume that many of these children intend to

leave school because of a lack of interest and/or lack of proficiency in school work, then these findings are consistent with results obtained from studies of English secondary school children. Bynner (1969) and Bewley & Bland (1977) found no evidence of a relationship between smoking and social class; however, in both investigations, smokers tended to be less academically able than non-smokers.

Several researchers have reported associations between measures of drinking and smoking in older teenagers and adults (Davies & Stacey, 1972; Orford *et al*, 1974; Dight, 1976). The association between drinking and smoking experience in the present study provides further evidence for the existence of this relationship and extends the age range over which it has been found. Furthermore, this finding is consistent with Davies & Stacey's suggestion that smoking and drinking may serve similar functions for some young people.

The associations between current leisure activities and alcohol consumption are similar to those found by Davies & Stacey in their study of 14- to 17-year-olds. Children who mentioned church-related activities tended to report lower levels of alcohol consumption and smoking experience. Children who mentioned discos and organised groups as current spare-time activities, and children who mentioned visiting discos and licensed premises as activities which they will engage in when older, tended to report higher levels of alcohol consumption and smoking experience.

Finally, current levels of alcohol consumption and smoking experience were associated with the extent to which the children said they envied older teenagers. Children who reported higher levels of consumption often said they would like to have more freedom from adult controls.

## 4 The morality of drinking

The results described in Chapter 2 indicate that consumption of alcohol increases between 10 and 14 years. If we assume that there is some kind of consistency between moral beliefs and behaviour, then we can predict: (1) that beliefs about the morality of drinking become progressively more lenient between 10 and 14 years; and (2) that children who consume more (whatever their age) take a generally more lenient view of the morality of drinking. These two hypotheses are examined in this chapter.

### 4.1 Procedure

Each child was asked to indicate how wrong he (she) thought it was for boys and girls of his (her) age to engage in various activities (for example, stealing, breaking windows) by pointing to one of four response categories on a visual-aid card: never wrong, sometimes wrong, usually wrong, always wrong. Questions referring to drinking, smoking and drug-taking were embedded amongst these items. For example, each child was asked: 'How wrong do you think it is for boys of your age to drink spirits like whisky, Bacardi or vodka?' Each question was asked twice: once with specific reference to the child's own sex and once with specific reference to the opposite sex. Half of the children within each Age  $\times$  Sex  $\times$  School group were first given items referring to their own sex and half were first given items referring to the opposite sex. Further details of the procedure are given in Appendix B.

### 4.2 Spirit drinking

Seventy-six per cent said it is 'always wrong' for children of their age and sex to drink spirits; an additional 15 per cent said it is 'usually wrong'. Table 4.1 shows there were no age-related differences in this respect. The second part of the table gives a breakdown by sex: the boys tended to be slightly less severe in their judgements.

The answers to the question referring to the children's own sex were compared with the answers to the question referring to the opposite sex. The numbers of boys and girls who judged spirit drinking by the opposite sex more or less severely are given in Table 4.2. Seventy-seven per cent gave the same response to both questions. However, among those who did not, girls tended to judge

spirit drinking by boys less severely than boys judged spirit drinking by girls. There were no age-related differences in this respect.

Table 4.1 Judgements of the morality of spirit drinking

	Age			Sex	
	10	12	14	Boys	Girls
Never wrong (A)	3	2	1	5	1
Sometimes wrong (B)	6	7	14	17	10
Usually wrong (C)	21	17	20	30	28
Always wrong (D)	98	102	93	140	153
	128	128	128	192	192

Age differences:  $X^2 = 3.05$ ;  $df = 4$ ; NS.

Sex differences: for A + B versus D

$X^2 = 4.23$ ,  $df = 1$ ,  $P < 0.05$ ;

for C versus A + B + D

$X^2 = 0.08$ ,  $df = 1$ , NS;

overall  $X^2 = 4.31$ ,  $df = 2$ , NS.

Table 4.2 Spirit drinking: Judgements of the opposite sex compared with judgements of the children's own sex

	Sex	
	Boys	Girls
More severe (A)	25	10
Same (B)	146	151
Less severe (C)	21	31
	192	192

For A versus C

$X^2 = 8.06$ ,  $df = 1$ ,  $P < 0.01$ ;

for B versus A + C

$X^2 = 0.37$ ,  $df = 1$ , NS;

overall  $X^2 = 8.43$ ,  $df = 2$ ,  $P < 0.05$ .

### 4.3 Beer/lager drinking

Almost half (46 per cent) said it is 'always wrong' for children of their age and sex to drink beer or lager. However, the proportion of children who chose the extreme response category decreased with age (Table 4.3). Whereas 55 per cent of the 10-year-olds claimed that this activity is 'always wrong', only 30 per cent of the 14-year-olds did so. Again, the boys tended to be slightly less severe in their judgements.

Sixty-five per cent gave the same answer when making judgements about beer/lager drinking by the opposite sex. However, among those who made different judgements, boys tended to be more severe when judging beer/lager drinking by girls and girls tended to be less severe when making judgements about boys. These data and the relevant statistical tests are set out in Table 4.4.

Table 4.3 Judgements of the morality of beer/lager drinking

	Age			Sex	
	10	12	14	Boys	Girls
Never wrong (A)	4	2	4	9	1
Sometimes wrong (B)	17	25	32	38	36
Usually wrong (C)	36	34	54	62	62
Always wrong (D)	71	67	38	83	93
	128	128	128	192	192

Trend test for age changes\*

Source of variation	df	X <sup>2</sup>	Signif. level
Due to linear regression	1	17.13	$P < 0.001$
Departure from regression line	1	3.28	$P < 0.1$
Total	2	20.41	$P < 0.001$

\*D versus A + B + C.

Sex differences: for A versus D

 $X^2 = 6.95$ ,  $df = 1$ ,  $P < 0.01$ ;

for B versus C

 $X^2 = 0.03$ ,  $df = 1$ , NS;

for A + D versus B + C

 $X^2 = 0.04$ ,  $df = 1$ , NS;overall  $X^2 = 7.02$ ,  $df = 3$ ,  $P < 0.1$ .

Table 4.4 Beer/lager drinking: Judgements of the opposite sex compared with judgements of the children's own sex

	Sex	
	Boys	Girls
More severe (A)	52	22
Same (B)	119	132
Less severe (C)	21	38
	192	192

For A versus C

 $X^2 = 15.79$ ,  $df = 1$ ,  $P < 0.001$ ;

for B versus A + C

 $X^2 = 1.94$ ,  $df = 1$ , NS;overall  $X^2 = 17.73$ ,  $df = 2$ ,  $P < 0.001$ .

#### 4.4 Shandy/cider drinking

Table 4.5 shows that shandy/cider drinking was viewed more leniently by the older children. The age-related trend is highly significant. Whereas 67 per cent of the 10-year-olds judged shandy/cider drinking as 'usually wrong' or 'always

wrong', only 23 per cent of the 14-year-olds did so. The breakdown by sex given in the second part of the table shows that the boys were more lenient overall in this respect.

Seventy-three per cent gave the same response when judging shandy/cider drinking by the opposite sex. Among those who gave a different response, boys judged shandy/cider drinking by girls more severely than girls judged shandy/cider drinking by boys (Table 4.6).

Table 4.5 Judgements of the morality of shandy/cider drinking

	Age			Sex	
	10	12	14	Boys	Girls
Never wrong (A)	10	16	35	41	20
Sometimes wrong (B)	32	57	64	81	72
Usually wrong (C)	45	33	24	44	58
Always wrong (D)	41	22	5	26	42
	128	128	128	192	192

Trend test for age changes

Source of variation	df	X <sup>2</sup>	Signif. level
Due to linear regression	1	59.10	$P < 0.001$
Departure from regression line	5	3.90	NS
Total	6	63.00	$P < 0.001$

Sex differences: for A versus D

$X^2 = 10.80$ ,  $df = 1$ ,  $P < 0.01$ ;

for B versus C

$X^2 = 2.35$ ,  $df = 1$ , NS;

for A + D versus B + C

$X^2 = 0.29$ ,  $df = 1$ , NS;

overall  $X^2 = 13.44$ ,  $df = 3$ ,  $P < 0.01$ .

Table 4.6 Shandy/cider drinking: Judgements of the opposite sex compared with judgements of the children's own sex

	Sex	
	Boys	Girls
More severe (A)	34	22
Same (B)	146	135
Less severe (C)	12	35
	192	192

For A versus C

$X^2 = 12.65$ ,  $df = 1$ ,  $P < 0.001$ ;

for B versus A + C

$X^2 = 1.61$ ,  $df = 1$ , NS;

overall  $X^2 = 14.26$ ,  $df = 2$ ,  $P < 0.001$ .

#### 4.5 Drunkenness

Table 4.7 shows that most of the children (87 per cent) said it is 'always wrong' for children of their age and sex 'to get drunk'. The boys tended to be slightly less severe in this respect.

Eighty-six per cent gave the same response when judging drunkenness in the opposite sex. However, among those who gave a different response, girls tended to judge drunkenness in the opposite sex more leniently than the boys did (Table 4.8).

#### 4.6 Drug-taking

Most of the children (96 per cent) said it is 'always wrong' for children of their age and sex 'to take drugs for fun'. There were no significant differences attributable to age or sex, and no differences between judgements of their own and of the opposite sex.

#### 4.7 Smoking

Seventy-three per cent said that smoking is 'always wrong' for children of their age and sex. However, there was a highly significant decrease with age in the proportion who made this claim (Table 4.9). There were no significant differences between judgements given by boys and girls.

Seventy-five per cent gave the same response when questioned about smoking with respect to the opposite sex. There were no indications of a 'double standard' in the judgements of those children who gave a different response.

Table 4.7 Judgements of the morality of drunkenness\*

	Age			Sex	
	10	12	14	Boys	Girls
Never wrong (A)	2	2	0	4	0
Sometimes wrong (B)	2	2	5	7	2
Usually wrong (C)	5	12	15	16	16
Always wrong (D)	103	112	95	149	161
	112	128	115	176	179

\*Twenty-nine interview schedules did not contain the 2 items referring to drunkenness. Therefore this information is based on responses obtained from 355 children.

Age differences:  $X^2 = 4.49$ ;  $df = 2$ ; NS.

Sex differences: for A + B versus D

$X^2 = 6.67$ ,  $df = 1$ ,  $P < 0.01$ ;

for C versus A + B + D

$X^2 = 0.00$ ,  $df = 1$ , NS;

overall  $X^2 = 6.67$ ,  $df = 2$ ,  $P < 0.05$ .



Table 4.8 Drunkenness: Judgements of the opposite sex compared with judgements of the children's own sex\*

	Sex	
	Boys	Girls
More severe (A)	16	6
Same (B)	153	152
Less severe (C)	7	21
	176	179

\*Twenty-nine interview schedules did not contain the 2 items referring to drunkenness. Therefore this information is based on responses obtained from 355 children.

For A versus C

$X^2 = 11.22$ ,  $df = 1$ ,  $P < 0.001$ ;

for B versus A + C

$X^2 = 0.30$ ,  $df = 1$ , NS;

overall  $X^2 = 11.52$ ,  $df = 2$ ,  $P < 0.01$ .

Table 4.9 Judgements of the morality of smoking

	Age			Sex	
	10	12	14	Boys	Girls
Never wrong (A)	2	1	0	3	0
Sometimes wrong (B)	7	10	19	13	23
Usually wrong (C)	12	21	33	31	35
Always wrong (D)	107	96	76	145	134
	128	128	128	192	192

Trend test for age changes\*

Source of variation	df	$X^2$	Signif. level
Due to linear regression	1	18.90	$P < 0.001$
Departure from regression line	1	0.53	NS
Total	2	19.43	$P < 0.001$

\*D versus A + B + C.

#### 4.8 Relationships between judgements of the morality of drinking/smoking and reported drinking/smoking behaviour

In order to examine the degree of intercorrelation between moral judgements about drinking and smoking, arbitrary values of 1 to 4 were assigned to the responses covering the range 'never wrong' to 'always wrong'. Table 4.10 gives the matrix of correlations computed on this basis. As very few children gave responses other than 'always wrong' to the questions about drug-taking, this variable is not included. The correlations range from low to moderate; however, all are positive, only one is not significant and most are highly significant. This

means that boys and girls who judged one activity relatively leniently tended to make relatively lenient judgements about the other activities.

This degree of intercorrelation between judgements allows us to replace the scaled scores for each child's responses to the five questions by a single value. The sums of possible scores for the five variables cover a range from 5 (all of the activities judged as 'never wrong') to 20 (all of the activities judged as 'always wrong'). Table 4.11 gives the correlations between this composite variable and the major measures of alcohol consumption and smoking experience. The partial correlation coefficients describe the relationships between the composite variable and the measures of drinking and smoking with age held constant<sup>1</sup>.

All of the correlation coefficients in Table 4.11 are negative. This means that children who judged drinking and smoking activities relatively leniently tended to report relatively higher levels of alcohol consumption and smoking experience. However, the simple correlation between the composite moral judgement and Drinking Index scores for girls is not significant. Thus, for girls, judgements of the morality of drinking and smoking are more closely associated with gross differences between Non-drinkers, Tasters and Drinkers than they are with differences between amounts consumed by Drinkers.

Table 4.10 Kendall rank order correlations between moral judgements of drinking and smoking. (Correlations for boys are given above the diagonal and correlations for girls are given below the diagonal.)

	1	2	3	4	5
Drinking spirits (1)		0.33†	0.06	0.28†	0.14*
Drinking beer/lager (2)	0.25†		0.25†	0.40†	0.36†
Drinking shandy/cider (3)	0.19†	0.39†		0.17†	0.18†
Getting drunk (4)	0.21†	0.35†	0.26†		0.34†
Smoking (5)	0.15*	0.19†	0.18†	0.25†	

\* $P < 0.05$ .

† $P < 0.01$ .

‡ $P < 0.001$ .

Table 4.11 Kendall rank order correlations between moral judgements of drinking/smoking and alcohol consumption/smoking experience. (First order correlations—with age held constant—are given in parentheses.)

	Gross Drinking Scale	Drinking Index	Smoking Experience Scale
Boys	-0.24* (-0.23)	-0.26* (-0.21)	-0.23* (-0.20)
Girls	-0.29* (-0.22)	-0.11 (-0.04)	-0.25* (-0.14)

\* $P < 0.001$ .

<sup>1</sup>When a significant correlation is obtained between two variables there remains the possibility that this is due to an association between each of the variables and a third variable. In the present study it seemed possible that correlations between the composite moral judgement scores and drinking/smoking experience could be explained in terms of the concomitant variation of both with age. The partial correlation coefficients in Table 4.11 allow us to examine this possibility.

#### 4.9 Summary and discussion

Most of the children said it is 'always wrong' for children of their age and sex to get drunk or drink spirits. The respective proportions who made this claim (87 per cent and 76 per cent) did not vary significantly with age. On the other hand, the severity of moral judgements about beer/lager and shandy/cider drinking decreased with age: 55 per cent, 52 per cent and 30 per cent of the 10-, 12- and 14-year-olds said it is 'always wrong' for children of their age and sex to drink beer or lager; the corresponding proportions who said shandy/cider drinking is 'always wrong' were 32 per cent, 17 per cent and 4 per cent. This indicates that the predicted increase in leniency of judgements between 10 and 14 years is specifically related to the moderate consumption of less potent drinks.<sup>1</sup>

Jahoda & Crammond (1972) found that most of the 8- and 10-year-olds in their sample were able to distinguish between alcoholic and non-alcoholic beverages. However, the results described in this chapter indicate that the concept which older primary school children have of alcohol is more than just a simple operational scheme enabling them to contrast alcoholic and non-alcoholic drinks. Even the 10-year-olds tended to vary their judgements according to the potency of the beverages named. Spirit drinking was judged more severely than beer/lager drinking; and both of these activities were judged more severely than shandy/cider drinking. Clearly, many of them were aware of sub-classes within the general category of alcoholic drinks.

The boys tended to be less severe in their judgements of the drinking activities of boys than the girls were with respect to the drinking activities of girls. Moreover, children who gave different responses with respect to their own and to the opposite sex tended to use a double standard of morality: the drinking activities of girls were judged more severely than the drinking activities of boys.

Jahoda & Crammond found a somewhat similar double standard in 6- to 10-year-olds' judgements of photographs of young adults engaged in drinking and non-drinking activities: photographs of female drinkers were rated as being more disliked than photographs of male drinkers.

Most of the children at each age expressed considerable disapproval of 'taking drugs for fun'. However, judgements of the morality of smoking showed the same age-related trend as judgements of the morality of beer/lager and shandy/cider drinking. Although a majority of children at each age expressed disapproval of smoking, there was a highly significant decrease in the extent of this disapproval with increasing age.

The judgements referring to the morality of smoking differed in two important respects from the judgements referring to drinking. First, there were no significant differences between judgements made by boys and girls. Second, girl smokers were not judged more severely than boy smokers. These findings are of considerable interest. Jahoda & Crammond found that the 6- to 10-year-old girls in their sample judged female smokers more harshly than male smokers. Although completely different questioning procedures were used in the present study, the differences between the results of the two studies are consistent with the view mentioned in the previous chapter that girls' attitudes towards smoking have been changing over recent years.

Children who made relatively lenient judgements about one kind of drinking

<sup>1</sup> There were no significant differences between catchment areas with respect to this and other findings described in this chapter.

activity tended to make relatively lenient judgements about other drinking/smoking activities. Furthermore, although the girls' judgements were more closely associated with scores on the Gross Drinking Scale than with scores on the Drinking Index, children who made relatively lenient judgements about drinking/smoking activities tended to report higher levels of alcohol consumption and smoking experience.

## 5 The influence of peers and parents

Two major age-related trends appear to play an important part in determining the behaviour of 10- to 14-year olds: an increase in the influence of the peer group and a decrease in parental control. As Jahoda & Crammond (1972) suggest, it is likely that both of these trends are associated with the marked changes in attitudes/behaviour related to drinking which appear to occur between 10 and 14 years.

### 5.1 The influence of the peer group

The extent to which the children perceived themselves as being influenced by their friends was assessed by asking them what they would do in a series of ten hypothetical situations describing conflicts which can be resolved according to peer-approved or adult-approved solutions<sup>1</sup>. For example, the first question was:

'You are out in the town one evening with some friends. They suggest you ring some doorbells and run away. What would you really do in this situation? Tell them they shouldn't do it, or let each one do what he wants?'

The answer to this question was followed by: 'How certain or sure are you that you would do this?' The child answered this by choosing (pointing to or reading) one of three categories on a visual-aid card: absolutely sure, fairly sure, not very sure.

The answers were scaled by assigning arbitrary scores of 1 to 3 for decreasing certainties when the adult-approved solution was chosen, and scores of 4 to 6 for increasing certainties when the peer-approved solution was chosen. For example, the range of answers and scores which could be obtained from the item described above is:

Tell them they shouldn't do it (adult-approved solution)			Let each one do what he wants (peer-approved solution)		
Absolutely sure	Fairly sure	Not very sure	Not very sure	Fairly sure	Absolutely sure
1	2	3	4	5	6

The scores for the ten items were subjected to a series of principal components

<sup>1</sup> The vignettes presented (Questions 4 to 13) were modifications of Form Y of Bronfenbrenner's Moral Dilemmas Scales (see, for example, Bronfenbrenner, 1967). We are grateful to Dr. Halla Beloff for providing information about her work in Britain with these scales (Beloff & Paton, 1970; Beloff & Temperley, 1972). A full description of the items and associated procedures is given in Appendix B.

and factor analyses.<sup>1</sup> Separate analyses were carried out for each age group, for each sex and for the sample as a whole. The most stable structure (stable in the sense of being replicated in each of the separate analyses) was provided by the loadings on the first components of the unrotated principal components solutions. Table 5.1 gives a brief description of the items together with their loadings on the first components obtained from the separate analyses. All but one of the loadings are positive, and all—excepting those in the fourth row—are moderate or high. This means that children who gave peer-approved answers to one question also tended to give peer-approved answers to the other questions. Conversely, children who gave adult-approved answers to one question also tended to give adult-approved answers to the other questions. Note, however, that the answers to Questions 5, 10 and 11 tend to have the highest loadings. This means that although the components describe a general dimension of peer versus adult influence, the items referring to mischievous activities tend to have slightly higher weightings.

Table 5.1 Peer Group Pressure: Loadings on the first principal components (decimal points omitted)

Question number	Content	Age			Sex		All respondents
		10	12	14	Boys	Girls	
4	Not talking peers out of mischief	41	45	57	53	47	52
5	Engaging in mischief	68	69	64	71	60	67
6	Not responding to adult pressure	43	36	11	44	38	38
7	Preferring the company of peers	19	30	-01	02	26	14
8	Not defending a child rejected by peers	62	51	46	59	47	53
9	Not responding to adult pressure	40	30	52	48	47	49
10	Not talking peers out of mischief	61	63	58	71	62	67
11	Engaging in mischief	69	71	74	81	65	75
12	Preferring the company of peers	49	64	26	50	57	52
13	Not defending a child rejected by peers	62	49	32	53	39	46
Percentage variance accounted for		29	28	23	33	25	29

Factor scores were calculated from the factor-score coefficient matrix obtained from the principal components analysis of the scores obtained from the whole sample. These scores (with mean = 0, and standard deviation = 1) provided a measure of the extent to which the children perceived themselves as being influenced by their friends (Peer Group Pressure).

<sup>1</sup> Principal components/factor analysis attempts to describe a large number of variables in terms of a smaller number of components or factors. Each component/factor comprises certain items, and the component/factor loading of each item shows how strongly that item is associated with the component/factor as a whole.

The results obtained from a Drinking Category  $\times$  Age  $\times$  Sex  $\times$  Catchment Area analysis of variance of the factor scores are shown in Table 5.2. Each of the main effects is significant. The mean scores shown in Table 5.3 show that older children, boys and children from working-class catchment areas tended to perceive themselves as under greater Peer Group Pressure than did younger children, girls and children from middle-class catchment areas. However, of greater interest here is the significant Drinking Category factor: children classified as Drinkers tended to perceive themselves as being under greater Peer Group Pressure than did Non-drinkers; children classified as Tasters occupied a middle position in this respect.<sup>1</sup>

Table 5.2 Analysis of variance of the Peer Group Pressure factor scores

Source	SS	df	MS	F	P
Drinking Category (A)	7.77	2	3.88	5.09	0.01
Age (B)	63.98	2	31.99	41.92	0.001
Catchment Area (C)	5.93	2	2.97	3.89	0.05
Sex (D)	6.77	1	6.77	8.87	0.01
A $\times$ B	6.83	4	1.71	2.24	NS
A $\times$ C	1.23	4	0.31	< 1	NS
A $\times$ D	1.11	2	0.56	< 1	NS
B $\times$ C	0.65	4	0.16	< 1	NS
B $\times$ D	1.07	2	0.53	< 1	NS
C $\times$ D	3.05	2	1.53	2.00	NS
A $\times$ B $\times$ C	2.56	8	0.32	< 1	NS
A $\times$ B $\times$ D	4.35	4	1.09	1.42	NS
A $\times$ C $\times$ D	1.59	4	0.40	< 1	NS
B $\times$ C $\times$ D	6.08	4	1.52	1.99	NS
Residual	257.96	338	0.76		

## 5.2 The influence of parents

The extent to which the children perceived themselves as being influenced by parental decisions (Parental Control) was assessed in a manner similar to that described in the preceding section. However, in this case the hypothetical situations described a variety of conflicts between children and parents. The nine items devised for this scale (Questions 14 to 22) are described in Appendix B.

As with the Peer Group Pressure scores, the most stable structure was provided by the loadings on the first components of the unrotated principal components solutions. Table 5.4 shows the loadings obtained from separate age and sex groupings together with those obtained from the whole sample. Two of the items referring to parental decisions not concerning health and well-being (bedroom colour schemes, hairstyles) have slightly lower weightings. However, most of the loadings are above 0.3 and differences between them are small. Thus children who perceived themselves as being under greater Parental Control in any one context tended to perceive themselves as being under greater control in other contexts.

<sup>1</sup> Further analysis indicated that the difference between drinkers and non-drinkers was greater at 12 and 14 years than at 10 years. However, Table 5.2 shows that the Drinking Category  $\times$  Age interaction term is of marginal significance only.

Table 5.3 Means and standard deviations of Peer Group Pressure factor scores

Drinking Category					
Non-drinkers		Tasters		Drinkers	
Mean	SD	Mean	SD	Mean	SD
-0.45	0.83	-0.16	0.92	0.19	1.03
Age					
10		12		14	
Mean	SD	Mean	SD	Mean	SD
-0.57	0.83	0.06	1.00	0.51	0.86
Catchment Area					
Working-class		Mixed		Middle-class	
Mean	SD	Mean	SD	Mean	SD
0.21	0.99	-0.04	1.00	-0.12	0.99
Sex					
Boys		Girls			
Mean	SD	Mean	SD		
0.15	1.08	-0.15	0.90		

Table 5.4 Parental Control: Loadings on the first principal components (decimal points omitted)

Question number	Content of parent versus child conflict	Age			Sex		All respondents
		10	12	14	Boys	Girls	
14	Bedtime	40	58	52	54	55	55
15	Bedroom colour scheme	41	28	36	26	50	39
16	Reading matter	57	57	40	58	54	56
17	Eating sweets	55	35	31	46	46	45
18	Choice of clothing	56	56	52	58	61	59
19	Homework	44	58	44	58	49	52
20	Dangers involved in using cookers	26	51	42	47	43	44
21	Hairstyles	31	22	44	43	33	38
22	Harmful footwear	61	59	63	60	72	66
Percentage variance accounted for		22	24	21	26	28	26

The results of an analysis of variance of factor scores calculated similarly to the Peer Group Pressure scores are given in Table 5.5. Two of the main effects are significant. Table 5.6 shows that the extent to which the children perceived themselves as being influenced by parental decisions decreases with age.



Children classified as Drinkers saw themselves as being less influenced by parental decisions than did Non-drinkers; children classified as Tasters tend to occupy a middle position.<sup>1</sup>

Table 5.5 shows that the Age  $\times$  Sex interaction term is also significant. The nature of this interaction is shown in Table 5.7. There are no significant differences between the scores for boys and girls at 10 or 12 years; however, the 14-year-old girls tended to perceive themselves as being less influenced by parental decisions.

Table 5.5 Analysis of variance of the Parental Control factor scores

Source	SS	df	MS	F	P
Drinking Category (A)	13.06	2	6.53	8.65	0.001
Age (B)	69.24	2	34.62	45.89	0.001
Catchment Area (C)	4.06	2	2.03	2.69	NS
Sex (D)	0.43	1	0.43	< 1	NS
A $\times$ B	6.22	4	1.56	2.06	NS
A $\times$ C	3.96	4	0.99	1.31	NS
A $\times$ D	0.43	2	0.22	< 1	NS
B $\times$ C	3.76	4	0.94	1.25	NS
B $\times$ D	4.63	2	2.31	3.07	0.05
C $\times$ D	0.75	2	0.37	< 1	NS
A $\times$ B $\times$ C	3.51	8	0.44	< 1	NS
A $\times$ B $\times$ D	0.71	4	0.18	< 1	NS
A $\times$ C $\times$ D	1.20	4	0.30	< 1	NS
B $\times$ C $\times$ D	0.95	4	0.24	< 1	NS
Residual	255.00	338	0.75		

Table 5.6 Means and standard deviations of Parental Control factor scores

	Age					
	10		12		14	
	Mean	SD	Mean	SD	Mean	SD
Non-drinkers	0.81	0.83	0.62	0.86	-0.11	1.01
Tasters	0.42	0.76	0.17	0.97	-0.33	0.91
Drinkers	0.58	0.87	-0.21	0.88	-0.71	0.83

Table 5.7 Analysis of the Age  $\times$  Sex interaction in the Parental Control factor scores

Table 3.7 Analysis of the Age $\times$ Sex interaction							
Age	Sex				df	<i>t</i>	<i>P</i> (2-tailed)
	Boys		Girls				
	Mean	SD	Mean	SD			
10	0.48	0.90	0.63	0.75	126	0.99	NS
12	-0.04	1.01	0.09	0.89	126	0.78	NS
14	-0.40	0.94	-0.77	0.78	126	2.38	0.05

<sup>1</sup> The differences between drinkers and non-drinkers were greater at 12 and 14 years than at 10 years; children from middle-class catchment areas tended to see themselves as being under greater Parental Control. However, Table 5.5 shows that these two trends are of marginal significance only.

### 5.3 Parental Discussion

Each item in the Parental Control scale was followed by an additional question: 'Would you have talked it over with your parents?' This was followed by: 'How sure are you?' As before, the child answered this by choosing one of the answers on the visual-aid card.<sup>1</sup>

The scores obtained from the answers to these questions will receive only a brief description here as they were not associated with the Drinking Category factor. Parental Discussion increased with age, and the boys said the conflicts would receive less discussion than did the girls.

### 5.4 Relationships between Peer Group Pressure/Parental Control/Parental Discussion and scores on the Drinking Index

The first and second columns in Table 5.8 show correlations between the three variables described in this chapter and scores on the Drinking Index. The third and fourth columns give partial correlation coefficients with adjustments for age.

For girls, all of the coefficients are low; only the simple correlations between Peer Group Pressure, Parental Control and the Drinking Index achieve even a marginal level of significance. For boys, Peer Group Pressure is positively associated and Parental Control is negatively associated with higher levels of alcohol consumption. However, although highly significant, the slightly smaller partial coefficients indicate that the relationships between the variables differ to some extent over the age groups. The differences are shown in Table 5.9. The correlation between alcohol consumption and Peer Group Pressure tends to increase with age. Only at 14 is the association of more than marginal significance. On the other hand, the correlation between Parental Control and consumption at 14 years is only of marginal significance. In summary, the relationships between the boys' scores shown in Tables 5.8 and 5.9 indicate that although Parental Control and Peer Group Pressure are both associated with alcohol consumption, the association with the former appears to be more substantial at 10 and 12 years whereas the association with the latter tends to be more substantial at 14 years.<sup>2</sup>

### 5.5 Summary

As expected, the extent to which the children perceived themselves as being influenced by peers (Peer Group Pressure) increased with age; the extent to which they perceived themselves as being influenced by parental decisions (Parental Control) decreased with age. In addition, boys and children from working-class catchment areas perceived themselves as being under greater Peer Group Pressure than did girls and children from middle-class catchment

<sup>1</sup> This procedure is not entirely satisfactory. As the answer 'yes' always meant that conflicts with parents would be discussed, the answers may have been influenced to some extent by 'response biases' (in this case, perhaps tendencies to give the same answer to each question).

<sup>2</sup> The correlations between the boys' Parental Discussion and Drinking Index scores shown in Table 5.9 are small—only the correlation at 14 years achieves a marginal level of significance. However, the small increase with age suggests that this variable may have a more substantial negative association with consumption during the mid to late teens.

Table 5.8 Simple and partial correlations with the Drinking Index scores

	Simple correlation		Partial correlation with adjustments for age	
	Boys	Girls	Boys	Girls
Peer Group Pressure and Drinking Index	0.37†	0.15	0.23*	0.03
Parental Control and Drinking Index	-0.41†	-0.15	-0.31†	0.03
Parental Discussion and Drinking Index	-0.08	0.11	-0.13	0.05
df	110	89	109	88

\* $P < 0.01$ .

† $P < 0.001$ .

Table 5.9 Simple correlations for boys

	Age		
	10	12	14
Peer Group Pressure and Drinking Index	0.17	0.23	0.28*
Parental Control and Drinking Index	-0.38*	-0.42†	-0.22
Parental Discussion and Drinking Index	0.07	-0.17	-0.25
df	30	37	39

\* $P < 0.05$ .

† $P < 0.01$ .

areas. The sex difference is a typical finding reported almost routinely by research workers in a number of different countries including Scotland (Beloff & Temperley, 1972).

The relationships between drinking experience/alcohol consumption and the pressures perceived by the boys were simple and clear-cut. Non-drinkers saw themselves as being under greater Parental Control and lower Peer Group Pressure than did children classified as Drinkers. Boys classified as Tasters tended to occupy a middle position in both respects. Furthermore, among Drinkers, higher levels of alcohol consumption were associated with relatively low Parental Control and relatively high Peer Group Pressure.

For the 10- and 12-year-old boys, the associations between Parental Control and alcohol consumption (as measured by the Drinking Index) were stronger than the associations between Peer Group Pressure and consumption. However, whereas the association between Peer Group Pressure and alcohol consumption tended to increase with age, the association between Parental Control and consumption was stronger at 10 and 12 years than at 14 years.

The relationships between drinking experience/alcohol consumption and the pressures perceived by the girls were more complicated. The gross differences

between girls classified as Non-drinkers, Tasters and Drinkers were similar to those found for the boys. Non-drinkers saw themselves as being under greater Parental Control and lower Peer Group Pressure than did Drinkers; Tasters tended to occupy a middle position in both respects. However, among girls classified as Drinkers, alcohol consumption (as measured by the Drinking Index) was *not* associated with either of the two kinds of pressure.<sup>1</sup>

If we assume that Parental Control and Peer Group Pressure play important parts in determining drinking patterns among 10- to 14-year-olds, then the results summarised above indicate that although both are important in determining whether or not girls drink, they appear to be of less importance in influencing the amounts consumed by girls who do drink. For boys, Parental Control and Peer Group Pressure appear to be of importance in both respects, with the latter appearing to gain in strength with increasing age.

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<sup>1</sup> Although the associations between Peer Group Pressure/Parental Control and scores on the Drinking Index approached significance, the partial correlation coefficients holding age constant were far from significant.

## 6 The children's perceptions of drinkers and non-drinkers

Davies & Stacey (1972) attempted to discover some of the sources of motivation for drinking by asking adolescents questions about 'the kind of person I am' (actual self), 'the kind of person I would like to be' (ideal self), 'the teenager who drinks heavily' and 'the teenager who does not drink'. In this way, they were able to build global pictures of the teenagers' perceptions of heavy drinkers and non-drinkers. For example, most of the teenagers perceived heavy drinkers as tough, but unsociable; whereas non-drinkers were seen as lacking in toughness and not particularly sociable. Davies & Stacey suggest that the 'stereotypes' or 'images' which young people have of heavy drinkers and non-drinkers may be used as guides to action. In particular, they suggest that some adolescents may be tempted to drink heavily in order to achieve a tough image in the eyes of their fellows. Analogous conclusions have been drawn from studies of young smokers (Bynner, 1969) and drug-takers (Wiener, 1970). For example, Bynner suggests that smokers may gain esteem in the eyes of some boys because smoking symbolises toughness.

### 6.1 Procedure and methods of analysis

In the present study we attempted to provide a comprehensive description of the children's perception of drinkers and non-drinkers by asking them to rate a variety of different kinds of boys and girls (for example, *elements* like 'boys who drink a lot', 'boys who drink occasionally', 'boys that most boys like') in terms of the following seven characteristics or *constructs*:

Like discos	Don't like discos
Difficult to get on with	Easy to get on with
Don't act big or show off	Act big, show off
Cheeky	Not cheeky
Don't go out much with pals	Go out a lot with pals
Get into trouble or fight	Don't get into trouble or fight
Nice looking	Not nice looking

The constructs were selected on the basis of results obtained from a preliminary small-scale study in which 10- to 14-year-olds described the behavioural and personality characteristics of drinkers/non-drinkers and

popular/unpopular children (Aitken, 1976).<sup>1</sup> Most of the constructs need little comment. However, it is worth noting that few children mentioned toughness as a characteristic differentiating drinkers and non-drinkers. Those who did usually said something like 'they act hard' or 'they act big, think they're tough' when describing children who drink a lot. Thus these children saw the 'toughness' of children who drink a lot as a front or facade.<sup>2</sup>

A full account of the procedure used is given in Appendix B. Briefly, each construct was presented on a simple display card. For example, the first construct was presented thus:

Like discos	In between	Don't like discos
-------------	------------	-------------------

The interviewer read out the list of elements (Table 6.1) and the child described each in turn by choosing one of the three alternatives. The 'in between' category was used when the child was unable to decide on one of the polar descriptions. The responses were scored by assigning arbitrary values of 1, 2 and 3 to the left-hand, middle and right-hand alternatives.

In this way each element was rated on a series of three-point scales describing the seven constructs. This provided, for each child, a grid or matrix of ratings referring to constructs (rows) and elements (columns). Two 'consensus' grids were then constructed by computing the mean rating in each grid cell for each sex. These consensus grids provided a numerical description of the 'average' boy's and the 'average' girl's perceptions of drinkers, non-drinkers, popular and unpopular children, etc.

Each consensus grid was subjected to a full principal components analysis using Slater's (1972) INGRID programme. Slater's INGRID analysis provides loadings of constructs and elements. If the principal components are represented geometrically as reference axes, the positions of both constructs and elements can be plotted according to their component loadings. Such maps describe the relationships between constructs, between elements and between constructs and elements (Slater, 1973).

Figures 6.1 and 6.2 show the positions of elements and the direction-lines of constructs in relation to the first (horizontal) and second (vertical) components obtained from each independent analysis. A key to the symbols used to describe the elements is given in Table 6.1. In order to understand these maps the reader should note the following three principles: (1) Similarities and differences between elements are indicated by the distances between them. For example, 'boys/girls that most boys like' and 'boys/girls that most girls like'

<sup>1</sup> A repertory grid procedure (Kelly, 1955; Bannister & Mair, 1968) was used in this study. Briefly, each child described and rated drinkers/non-drinkers and popular/unpopular children (elements) in his (her) own words (constructs). Principal components analysis revealed two major dimensions of construing—an Evaluative dimension describing a variety of pleasant and unpleasant characteristics and a dimension contrasting characteristics of Extraversion-Introversion. The constructs selected for use in the present study were those which were most characteristic of these two dimensions. The terms 'element' and 'construct' are used in descriptions of repertory grid techniques; therefore, they provide an appropriate and convenient shorthand for the account given here.

<sup>2</sup> This should not be taken to mean that 10- to 14-year-olds do not perceive drinkers as being tougher than non-drinkers. Davies & Stacey (1972) have shown that 14-year-olds perceive abstainers as lacking in toughness. Furthermore, the results of a small-scale study conducted by the present author suggest that even 10-year-olds share this view. Eighty 10- to 14-year-olds judged photographs of young adults engaged in drinking and non-drinking activities. At each age drinkers were judged as being tougher than non-drinkers. (The photographs were selected from those used by Jahoda & Crammond (1972) in their study of 6- to 10-year-olds.)

are perceived as being similar and are contrasted with 'boys/girls that most boys do not like' and 'boys/girls that most girls do not like'. (2) Construct poles (denoted by direction-lines at the periphery of each map) perceived as having something in common also cluster together (that is, their direction-lines subtend small angles at the origin of the two components). For example, 'nice looking' and 'easy to get on with' are highly correlated on both maps. (3) The relationships between elements and constructs can be seen by comparing element positions with construct poles. For example, 'boys/girls that most boys like' and 'boys/girls that most girls like' are most closely described by 'go out a lot with pals' and 'nice looking'.

With these principles in mind, the construct relationships shown in Figures 6.1 and 6.2 can be summarised. The first components are defined by the five constructs subtending acute angles with the horizontal axes. These form an Evaluative dimension describing a variety of pleasant and unpleasant characteristics. The second components are defined by the two constructs subtending acute angles with the vertical axes. These appear to contrast characteristics of Extraversion-Introversion.<sup>1</sup> Note also that the construct poles defining the first components appear in the same positions in each map. For example, 'act big, show off' and 'get into trouble or fight' appear to describe negatively evaluated aspects of extraversion; 'nice looking' and 'easy to get on with' appear to

Table 6.1 Key to the abbreviations in Figures 6.1 and 6.2

(The same abbreviations are used in both figures; however, Figure 6.1 describes the boys' perceptions of boys whereas Figure 6.2 describes the girls' perceptions of girls.)

Element	Abbreviation
Boys/girls who drink a lot	Drink a lot
Boys/girls who drink occasionally	Drink occasionally
Boys/girls who never drink	Never drink
Boys/girls who smoke	Smoke
Boys/girls who do not smoke	Never smoke
Boys/girls that you would like to be like	Ideal self
Boys/girls like yourself	Self
Boys/girls that most boys like	Boys + ve
Boys/girls that most girls like	Girls + ve
Boys/girls that most grown-ups like	Grown-ups + ve
Boys/girls that your dad likes	Dad + ve
Boys/girls that your mum likes	Mum + ve
Boys/girls that most boys do not like	Boys - ve
Boys/girls that most girls do not like	Girls - ve
Boys/girls that most grown-ups do not like	Grown-ups - ve
Boys/girls that your dad does not like	Dad - ve
Boys/girls that your mum does not like	Mum - ve

<sup>1</sup> In the preliminary repertory grid study (Aitken, 1976), briefly described in the footnote on page 44, constructs such as 'like pop music and magazines vs. don't like pop music and magazines' also loaded on the second components. Thus alternative labels referring to youth culture and values could be used to describe this dimension. However, as constructs like 'full of fun vs. quiet, shy' also loaded on the second components, the author prefers the more global term used here. It is also worth noting that Heather (1977) has recently described a two-component structure in repertory grids obtained from adolescent and young adult males which is strikingly similar to the component structure described here. Although Heather labels his components according to a theory of value-systems, he does point out that constructs with high loadings on his second component are very similar to attributes describing an Extraversion-Introversion dimension.

Fig. 6.1

# Boys' perceptions of boys

(The first and second components account for 88% and 10% of the variance respectively.)

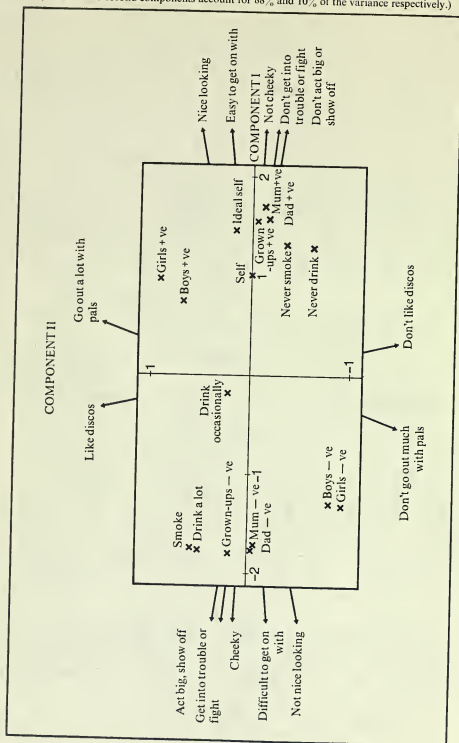
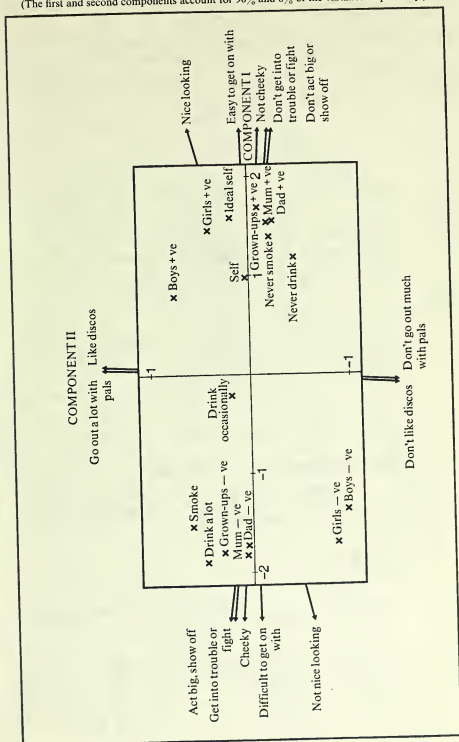




Fig. 6.2

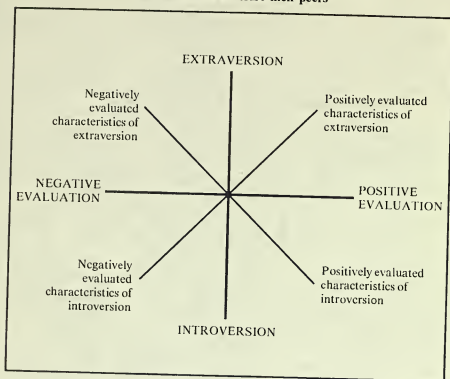
# Girls' perceptions of girls

(The first and second components account for 90% and 8% of the variance respectively.)



describe positively evaluated aspects of extraversion.<sup>1</sup> Figure 6.3 describes these relationships in a simple form and provides a useful mnemonic for describing the children's perceptions of the major elements.<sup>2</sup>

**Figure 6.3** The major structural features of the constructs used by the children to describe their peers



## 6.2 The children's perceptions of drinkers and non-drinkers

Comparable elements occupy similar positions in Figures 6.1 and 6.2. 'Boys/girls who drink a lot' and 'boys/girls who smoke' were perceived in terms of the neutral and negatively evaluated characteristics of extraversion:

Like discos

Go out a lot with pals

Act big, show off

Get into trouble or fight

<sup>1</sup> These four construct poles have low loadings on the second components. However, independent analyses of the consensus grids obtained from the 18 Age  $\times$  Sex  $\times$  Drinking Category groups (Appendix C) indicated that they reliably fall in the map regions described.

<sup>2</sup> Similar bidimensional structures (though differing slightly in nomenclature) have been described in a number of studies of children's behaviour (see, for example, Rachman, 1969). In common with the circumplex models suggested by these studies, the construct relationships in Figure 6.3 provide a succinct description of the dual and unitary nature of extraversion discussed by Eysenck and his colleagues (Eysenck & Eysenck, 1969). The unitary nature of extraversion is described by characteristics which are relatively neutral in evaluative terms. The dual nature is described on the one hand by positively evaluated characteristics of extraversion and on the other by negatively evaluated characteristics of extraversion.

Although 'boys/girls who do not smoke' were seen as slightly less introverted than 'boys/girls who never drink', both were perceived in terms of the neutral and positively evaluated characteristics of introversion:

- Don't like discos
- Don't go out much with pals
- Don't act big or show off
- Don't get into trouble or fight

Children who drink a lot and children who smoke were seen as being more disliked by grown-ups than by peers. Conversely, non-drinkers and non-smokers were perceived as being more liked by grown-ups than by peers.

'Boys/girls who drink occasionally' were perceived as more extraverted than non-drinkers. Occasional drinkers were also rated slightly negatively in terms of the Evaluative dimension.

### 6.3 The children's perceptions of children liked and disliked by peers

Figures 6.1 and 6.2 show that children perceived as being most liked by peers and children perceived as being most disliked by peers form two quite distinct clusters. 'Boys/girls that most boys/girls like' were perceived in terms of the neutral and positively evaluated aspects of extraversion:

- Go out a lot with pals
- Like discos
- Nice looking
- Easy to get on with

On the other hand, 'boys/girls that most boys/girls do not like' were perceived in terms of the neutral and negatively evaluated aspects of introversion:

- Don't go out much with pals
- Don't like discos
- Not nice looking
- Difficult to get on with

The boys (Figure 6.1) tended to perceive 'boys that most girls like' as being slightly more extraverted than 'boys that most boys like'. However, the girls (Figure 6.2) tended to perceive 'girls that most boys like' as being slightly more extraverted than 'girls that most girls like'. In other words, both sexes tended to see the opposite sex as having a greater preference for the more extraverted members of their own sex.

### 6.4 Perceptions of 'the self' and 'the ideal self'

Figures 6.1 and 6.2 show that 'the self' occupied a position midway between elements described in terms of the positively evaluated aspects of extraversion (boys/girls that most boys/girls like) and elements described in terms of the positively evaluated aspects of introversion (boys/girls who never drink).

'The ideal self' was rated more highly than 'the self' in terms of the constructs making up the Extraversion-Introversion dimension. However, 'the ideal self' was perceived as being less extraverted than 'boys/girls that most boys/girls like'. Thus, although the children tended to see their fellows as preferring extraverted children (children who like discos and going out a lot with pals), they tended to see their ideal selves as being less extraverted than this 'peer ideal'.

## 6.5 Differences associated with age, sex and drinking experience

The relationships portrayed in Figures 6.1 and 6.2 describe the 'average' boy's and the 'average' girl's perceptions of drinkers, non-drinkers, etc. In order to discover whether or not these views varied with age, sex and drinking experience, a series of consensus grids was constructed from the ratings obtained from the 18 Age  $\times$  Sex  $\times$  Drinking Category groups. As before, each grid was subjected to a full principal components analysis. The element and construct loadings obtained from the analyses are given in Appendix C. Most of the maps constructed from these loadings agreed with the thumbnail sketches given above. However, there were some differences between the various groups.

First, the views of boys classified as Non-drinkers differed in some respects from the views expressed by the other groups. For example, for the 10-year-olds, 'go out a lot with pals' correlated positively with 'don't like discos'. In the other consensus maps these poles were negatively correlated.<sup>1</sup> However, most of the features of the maps obtained from the 12- and 14-year-old boys classified as Non-drinkers were similar to those shown in Figures 6.1 and 6.2. Of particular importance, 'boys who never drink' were perceived mainly in terms of the positively evaluated aspects of introversion whereas 'the self' and 'the ideal self' occupied intermediate positions on the Extraversion-Introversion dimension. This means that even the Non-drinkers tended to perceive themselves and their ideal selves as being less introverted than 'boys who never drink'.

Secondly, the proportions of variance accounted for by the second components tended to increase with age. In terms of the relationships shown in the consensus maps, the older children tended to make clearer differentiations between children perceived as being extraverted and children perceived as being introverted.

Thirdly, the older children tended to perceive 'the ideal self' as being more extraverted than did the younger children. This indicates that the image of the 'peer ideal' (the good looking, easy-going extravert) becomes more attractive with increasing age. More important, it also indicates that the image of the non-drinker becomes *less* attractive with increasing age.

Finally, in 16 of the 18 maps, 'the self' occupied an intermediate position on the Extraversion-Introversion dimension. In other words, the 'average' child in most of the groups saw himself/herself as neither extraverted nor introverted. However, the 14-year-olds classified as Drinkers tended to rate the self as more extraverted than introverted. Furthermore, only these two groups placed 'boys/girls who drink occasionally' more towards the positive pole of the Evaluative dimension. In sum, the 14-year-olds classified as Drinkers tended to perceive 'the self' and 'the ideal self' and the occasional drinker more in terms of the positively evaluated characteristics of extraversion generally seen as the epitome of the 'peer ideal'.

## 6.6. Summary and discussion

Children who drink a lot were generally perceived as being rowdy and extra-

<sup>1</sup> The views of the 12- and 14-year-old boys classified as Non-drinkers agreed with the consensus view in this respect. However, for the 12-year-olds, 'go out a lot with pals' had a high negative loading on the first (evaluative) component. The 14-year-olds differed from the consensus view by rating 'boys that most boys like' more highly on the *negatively* evaluated characteristics of extraversion. Although the numbers in these three groups were small, these findings suggest that 10- to 14-year-old boys who have never tasted an alcoholic drink hold rather idiosyncratic views of the characteristics of children liked and disliked by other children and grown-ups.

verted; children who never drink were seen as well-behaved and introverted. The former were generally perceived as being more disliked by grown-ups than by other children, whereas the latter were seen as being more liked by grown-ups than by other children.

Neither of these two images provides a good match with the image of 'boys/girls that most boys/girls like'. Although children who drink a lot and children who are most liked by their peers were perceived as extraverts (as enjoying discos and going out a lot with pals), the former were seen as rowdy extraverts (as acting big and getting into trouble or fighting) whereas the latter were seen as easy-going extraverts (as being easy to get on with and good looking). On the other hand, although non-drinkers and children most liked by peers were generally positively regarded in terms of the characteristics making up the Evaluative (Good vs. Bad) dimension, the former were seen as considerably more introverted than the latter.

'Boys/girls that most boys/girls like' were seen as more extraverted than 'the ideal self'. The latter was perceived as more extraverted than 'the self'. Thus in this respect the image of 'the ideal self'—and particularly the image of 'the self'—was closer to the image of the non-drinker. However, even here the match was not complete: non-drinkers were perceived as more introverted than 'the ideal self' and 'the self'. It is important to note that even children who said they had never tasted an alcoholic drink tended to perceive 'boys/girls who never drink' as being more introverted than 'the ideal self' and 'the self'.

'Boys/girls who drink occasionally' occupied an intermediate position in terms of the characteristics which differentiated 'boys/girls who drink a lot' and 'boys/girls who never drink'. However, occasional drinkers were generally seen as being more extraverted than non-drinkers.

Two main trends were associated with the age variable. First, the images of non-drinkers and drinkers and the images of children who are liked and children who are disliked by their peers tended to become more differentiated with increasing age. Secondly, the older children tended to perceive 'the ideal self' as being more extraverted than did the younger children. Taken together, these two trends indicate that the image of the child who is most popular with his peers (the easy-going, good-looking extravert) becomes *more* attractive and the image of the non-drinker (the well-behaved introvert) becomes *less* attractive with increasing age.

The 14-year-olds classified as Drinkers differed from the other groups in two important respects. First, 'boys/girls who drink occasionally' were more positively evaluated in terms of the Evaluative (Good vs. Bad) dimension. Secondly, 'the self' was perceived as being more extraverted than introverted. These differences, taken together with the two age trends described above, indicate that the 14-year-old Drinkers tended to perceive the occasional drinker, 'the self' and 'the ideal self' as approaching the easy-going, good-looking extravert generally perceived as being most liked by other children. As the majority (72 per cent) of the 14-year-olds were classified as Drinkers this suggests that the image of the occasional drinker becomes more attractive over the years 10 to 14.

Children who smoke were perceived as having similar characteristics to children who drink a lot. In other words, they were generally seen as rowdy extraverts. However, although the non-smoker and the non-drinker were both perceived as being well-behaved and introverted, the former was generally seen as being less introverted than the latter. With hindsight, this finding is not surprising. Most 10- to 14-year-olds have at least tasted an alcoholic drink

(whether or not they consider themselves to be occasional drinkers) whereas a much smaller proportion are regular smokers. For this reason alone we would expect the image of the non-smoker to be closer to the image of 'the self'. As noted above, the 'average' child perceived 'the self' as occupying an intermediate position on the Extraversion-Introversion dimension.

The bidimensional structure portrayed in Figure 6.3 provides a simple conceptual framework against which the results of two comprehensive studies of the images of young drinkers (Davies & Stacey, 1972) and young smokers (Bynner, 1969) can be compared. In these investigations the scales defining the factors which most clearly differentiated between the images of heavy drinkers and abstainers (Davies & Stacey, 1972) and between the images of smokers and non-smokers (Bynner, 1969) appear to contrast negatively evaluated characteristics of extraversion with positively evaluated characteristics of introversion.

In Davies & Stacey's study, 14- to 17-year-olds perceived heavy drinkers as tougher and more rebellious than abstainers. Ratings of 'the ideal self' showed that extreme toughness and rebelliousness were perceived as undesirable. Thus it seems plausible to view this factor as crossing the upper left-hand and lower right-hand sectors of Figure 6.3.

In Bynner's study, 11- to 15-year-old English boys perceived smokers as being more precocious than non-smokers. As 'Precocity' had a negative correlation with a factor containing scales very much like the constructs loading highly on the Evaluative (Good vs. Bad) dimension obtained in the present study, it seems plausible to view this factor as crossing the upper left-hand and lower right-hand sectors of Figure 6.3.<sup>1</sup>

The conceptual framework described here also offers an explanation of Davies & Stacey's finding that 'the teenager who drinks heavily' and 'the teenager who does not drink' were both perceived as less sociable (and less attractive) than 'the ideal self'. If we make the plausible assumption that Davies & Stacey's sociability factor contrasts positively evaluated aspects of extraversion with negatively evaluated aspects of introversion, then it seems that preadolescents and adolescents perceive heavy drinkers as unsociable because of the rowdy characteristics of their extraverted behaviour, whereas abstainers are seen as not particularly sociable because of their perceived introverted characteristics.

<sup>1</sup> In Bynner's study, the 'Precocity' factor correlated negatively with an 'Educational Success' factor and positively with a 'Toughness' factor. Inspection of the scales which loaded on 'Educational Success' suggests that this was a general evaluative factor. Indeed, Bynner expressed dissatisfaction with this label because of the wide range of attributes which it embraced. In a later study of hospital workers' perceptions of drug addicts (Bynner & Romney, 1972; Romney & Bynner, 1972) he described a simpler bidimensional structure similar to that portrayed in Figure 6.3.

## 7 The characteristics of children who drink more than their peers

This brief chapter attempts to bring together the major variables associated with higher levels of alcohol consumption. The aim is to isolate those variables which play the greatest part in predicting the children's scores on the Drinking Index.

The statistical procedure chosen for this purpose was multiple correlation analysis. Multiple correlation analysis can be thought of as an extension of simple correlation analysis. A simple correlation coefficient is a measure of the degree of association between two variables; the size of the coefficient provides a measure of the extent to which one variable (the dependent or criterion variable) can be predicted from the other (the independent or predictor variable). A multiple correlation coefficient is a measure of the degree of association between a criterion variable and a *combination* of two or more predictor variables. Its size provides a measure of the extent to which we can predict the criterion variable from a weighted combination of the predictor variables. By having more than one predictor variable we aim to maximise the amount of the criterion variable's variance predicted, or accounted for, by the predictor variables.

The first stage in the computation of a multiple correlation coefficient involves the selection of independent or predictor variables. In the present study, two sets of predictor variables were included. The first set comprised the major variables which have already been shown (either for the boys or for the girls) to have significant associations with the Drinking Index. The second set consisted of the variables which defined the images described in the previous chapter.

There were 119 ratings on the construct scales describing the images summarised in the previous chapter. In order to reduce this number to a smaller subset, correlations were computed (for boys and girls separately) between the element ratings on the seven constructs and scores on the Drinking Index. For the girls, 10 image variables had significant correlations with the Drinking Index scores. All of these were included in the analysis of their scores. For the boys, 31 image variables were significantly correlated with scores on the Drinking Index. This finding is of interest as it clearly indicates that the perceptions which boys have of themselves and of their peers are associated with differences in alcohol consumption. However, as the use of large numbers of independent variables presents problems in multiple correlation analysis (Kerlinger & Pedhazur, 1973), the number included was further reduced by entering only those variables which referred to drinkers, non-drinkers, 'the self' and 'the ideal self'. There were 11 of these in all. These variables were selected in order to facilitate comparisons between the variables described here and the image variables described in Davies & Stacey's (1972) study of teenage drinkers.



Table 7.1 Multiple correlation analysis predicting the boys' Drinking Index scores

Predictor variable	Multiple correlation (R)	R <sup>2</sup>	Simple correlation	Beta coefficient
Age	0.37	0.13	0.37	0.10
Strict view of the morality of drinking and smoking*	0.48	0.23	-0.38	-0.26
Perception of 'the ideal self' as acting big, showing off	0.54	0.29	0.27	0.20
Parental Control	0.58	0.33	-0.41	-0.20
Perception of 'boys who drink occasionally' as easy to get on with	0.61	0.37	0.33	0.21
Has taken a drink in the absence of parents	0.63	0.39	0.29	0.17

\*This variable was computed similarly to the composite moral judgement variable described in Chapter 4, except that judgements referring to drunkenness were omitted. (These judgements were not obtained from 29 children.)

## 7.1 The characteristics of boys who drink more than their peers

The results of the multiple correlation analysis of the boys' data are shown in Table 7.1.<sup>1</sup> Six variables *each* accounted for a significant ( $P < 0.05$ ) proportion of the variance in the Drinking Index scores. The first column shows the multiple correlation coefficients. Note how these increase as additional predictor variables are added. The second column contains the squares of the multiple correlation coefficients. These describe the proportions of variance in Drinking Index scores accounted for by the predictor variables. For example, the age variable accounts for 13 per cent of the variance and the first four collectively account for 33 per cent of the variance. In sum, the six variables listed collectively account for 39 per cent of the variance in the Drinking Index scores. The third column gives simple correlations between the variables and the Drinking Index. The signs of these correlations show the directions of the associations. A positive sign indicates that higher scores on the variable in question are associated with higher levels of consumption; a negative sign indicates that higher scores on the variable are associated with lower levels of alcohol consumption. The fourth column gives weights which need to be applied to the variables if the combined set is to give the best prediction.

Four of the variables described and discussed in previous chapters need little comment. Higher levels of alcohol consumption are associated with increasing age and a less strict or more permissive attitude towards the morality of drinking and smoking. Note that lower Parental Control and drinking in the absence of parents both make independent contributions to the variance accounted for.

<sup>1</sup> The multiple correlation analysis was conducted as follows. The age variable was brought into the regression equation first in order to evaluate the contributions of the other variables with age controlled or held constant. The remaining variables were then entered in a 'stepwise' manner: the variable that accounted for the largest amount of variance in conjunction with age was entered first, the variable that accounted for the largest amount of variance in conjunction with the first two was entered next, and so on. At each step, only variables that accounted for a significant ( $P < 0.05$ ) proportion of the remaining variance in Drinking Index scores were allowed to enter the regression equation.



This suggests that although both are relatively important single predictors, *in conjunction* they are more important.

The remaining two variables in Table 7.1 refer to the images which heavier drinkers have of their fellows. Boys who reported higher as opposed to lower levels of alcohol consumption tended to perceive boys that they would like to be like ('the ideal self') as being more likely to act big or show off. Although not accounting for statistically significant contributions to the variance explained or accounted for, heavier drinkers also tended to perceive 'the ideal self' as liking discos simple correlation ( $r=0.23$ ,  $P<0.01$ ) and going out a lot with pals ( $r=0.23$ ,  $P<0.01$ ); and 'the self' as acting big or showing off ( $r=0.16$ ,  $P<0.05$ ), cheeky ( $r=0.16$ ,  $P<0.05$ ), getting into trouble or fighting ( $r=0.30$ ,  $P<0.001$ ) and liking discos ( $r=0.20$ ,  $P<0.05$ ).<sup>1</sup> These additional correlations with the Drinking Index suggest that the heavier drinkers' perception of 'the ideal self' as acting big or showing off is part of a complex of variables describing 'the self' and 'the ideal self' in terms of the neutral and negatively evaluated characteristics of extraversion summarised in the previous chapter. In other words, boys who reported higher levels of alcohol consumption tended to see themselves and their ideal selves as rowdy extraverts.

Finally, the boys who reported relatively high levels of alcohol consumption tended to perceive 'boys who drink occasionally' as being easy to get on with. Although not accounting for a statistically significant proportion of the variance explained in Table 7.1, the heavier drinkers also tended to perceive 'boys who drink a lot' as being easy to get on with ( $r=0.35$ ,  $P<0.001$ ). This means that boys with higher as opposed to lower Drinking Index scores tended to see drinkers in general (both boys who drink occasionally *and* boys who drink a lot) as being easy to get on with. Note that the results described in the previous chapter indicate that most 10- to 14-year-olds perceive 'boys/girls who drink a lot' as being difficult to get on with. Boys who drink more than their peers appear to have a somewhat different view.

Table 7.2 Multiple correlation analysis predicting the girls' Drinking Index scores

Predictor variable	Multiple correlation (R)	R <sup>2</sup>	Simple correlation	Beta coefficient
Age	0.27	0.07	0.27	0.11
Has tried a cigarette	0.38	0.14	0.35	0.21
Perception of 'girls who do not smoke' as acting big, showing off	0.46	0.22	0.27	0.33
Enviies the greater freedom enjoyed by older girls	0.52	0.27	0.30	0.30
Perception of 'girls who drink occasionally' as getting into trouble or fights	0.58	0.34	0.19	0.28
Perception of 'girls who drink occasionally' as liking discos	0.62	0.38	0.20	0.22

<sup>1</sup> These variables did not account for statistically significant proportions of the variance explained by the predictor variables in Table 7.1. However, this does not mean that they are unimportant, but rather that their influence was mediated by other variables in the regression equation.

## 7.2 The characteristics of girls who drink more than their peers

The results of the multiple correlation analysis of the girls' data are shown in Table 7.2. Six variables *each* accounted for a significant ( $P < 0.05$ ) proportion of the variance. The final multiple correlation coefficient accounts for 38 per cent of the variance in the Drinking Index scores.

Girls who reported higher levels of alcohol consumption had more smoking experience and tended to perceive 'girls who do not smoke' as being more likely to act big or show off. However, it is unlikely that the kind of 'showing off' that the heavier drinkers were thinking of when they rated non-smokers was qualitatively similar to the kind of 'showing off' that most of the children were thinking of when they rated the elements referring to children who smoke and children who drink a lot. During the initial pilot work two qualitatively different descriptions of 'showing off' were voiced. The first kind, which occurred most often, referred to things like 'drink to act big, show off, get drunk' and 'try to make themselves older.' Such comments were most often made when the children were talking about children who drink a lot. The second kind of comment, though less often voiced, was made when describing non-drinkers. Here, comments like 'stuck-up' and 'think they're better than anyone else' were occasionally offered. Thus it seems likely that the heavier drinkers amongst the girls were thinking of a 'holier-than-thou' image of the non-smoker when they were making these ratings.

Girls who reported higher levels of alcohol consumption also tended to say they envied the greater freedom from adult controls enjoyed by older girls. The results described in Chapter 3 showed that the girls classified as Drinkers tended to differ from the boys in this respect.

Finally, the two remaining variables in Table 7.2 refer to the image which the heavier drinkers amongst the girls had of occasional drinkers. 'Girls who drink occasionally' were perceived as being more likely to 'get into trouble or fight' and to 'like discos'. Although not accounting for significant proportions of the variance explained in Table 7.2, it is worth noting that the girls who reported higher levels of alcohol consumption also tended to perceive 'girls who drink occasionally' as being *less* likely to act big or show off ( $r = 0.17$ ,  $P < 0.05$ ) and 'girls who never drink' as being *more* likely to act big or show off ( $r = 0.20$ ,  $P < 0.05$ ). For the reasons given above, it seems that the heavier drinkers amongst the girls tended to view non-drinkers (as well as non-smokers) as having a 'holier-than-thou' image.

## 8 General discussion

The drinking and smoking prevalence figures have been summarised and discussed in Chapters 2 and 3. In this chapter we bring together the major variables which appear to be associated with alcohol consumption in 10- to 14-year-olds.

Jahoda & Crammond (1972) found that children's attitudes towards alcohol and drinking became increasingly negative over the years 6 to 10; their intention to drink when older decreased over the same age span. On the other hand, Davies & Stacey (1972) found that most 14- to 17-year-olds drink at least occasionally. Taken together, these findings indicate that important changes in behaviour and attitudes related to drinking occur between the ages of 10 and 14 (Jahoda & Crammond, 1972; Ritson, 1975).

The results of the present study confirm these expectations. There were two age-related trends in the children's drinking behaviour—one related to the amounts consumed and the other related to the settings in which drinking takes place. These trends were accompanied by a marked change in attitudes towards drinking.

Although the average consumption figures were lower, the age-related increase in consumption described in Chapter 2 was steeper than that reported by Davies & Stacey in the study of 14- to 17-year-olds. As Jahoda & Crammond did not obtain estimates of the amounts typically consumed by 6- to 10-year-olds, we have no way of assessing how the present findings compare with age-related consumption patterns in younger children. As Jahoda & Crammond suggest, it is likely that a modest increase in consumption occurs between 6 and 10 years. If this is the case, then the trends found in the present study cannot be construed as indicating a reversal in age-related consumption patterns. However, as Jahoda & Crammond found a decreasing intention to drink when older over the years 6 to 10, the findings reported here do point to a *disjunction* between the future intentions of 6- to 10-year-olds and the actual behaviour of 10- to 14-year-olds.

The second major age-related change in behaviour concerned with drinking appears to be related to the setting in which drinking takes place. Few of the 10- and 12-year-olds (2 per cent and 3 per cent, respectively) said they had taken a drink outside of the parental home or the home of adult relatives or friends of parents in the absence of parents. However, 20 per cent of the 14-year-olds said they had done so. Thus drinking in the absence of parents appears to increase over the first two years of secondary schooling.

As noted above, Jahoda & Crammond found that children's attitudes towards drinking (and smoking) became increasingly negative over the years 6 to 10.

In the present study, judgements of the morality of drinking and smoking decreased in severity over the years 10 to 14. Although completely different procedures and measures were used in the two investigations, it seems that 10-year-olds tend to hold the most severe attitudes towards drinking and smoking. Taken together, the results of these two studies are consistent with Jahoda & Crammond's suggestion that a complete *reversal in attitudes* towards drinking and smoking occurs between the years 10 to 14.

Several researchers have reported associations between drinking behaviour and attitudes towards drinking (Davies & Stacey, 1972; Orford *et al.*, 1974; Dight, 1976). Unfortunately, most investigations have been conducted with older teenagers or adults. Jahoda & Crammond reported correlations between attitudes towards drinking and the intention to drink when older; however, they did not examine associations between attitudes and actual or current drinking behaviour (that is, whether or not the children had tasted an alcoholic drink). For these reasons we know little about the interdependence of attitudes and drinking behaviour in younger children. The results of the present study go some way towards filling this gap: children who reported higher levels of drinking and smoking experience tended to make more lenient judgements with respect to the morality of drinking and smoking. This finding provides further evidence of the interdependence of attitudes towards drinking and reported drinking behaviour and extends the age range over which this interdependence has been found.

How can we account for the increase in alcohol consumption and *volte-face* in attitudes towards drinking which appear to occur between 10 and 14? Jahoda & Crammond list three factors which may come into play over this period: 'adolescent rebellion', decline of parental influence and increase in the influence of the peer group.

As Jahoda & Crammond suggest, the concept of 'adolescent rebellion' has little explanatory value in accounting for the increase in consumption and change in moral beliefs about drinking over the years 10 to 14. Most of the children were introduced to alcohol in the company of parents. Furthermore, when describing their most recent drinking experiences, most of them said that one or both parents were present. Therefore, it seems that much of the increase in consumption over these years occurs under the guidance of and with at least the tacit approval of parents.

It should also be noted that most of the children made severe judgements about the morality of spirit drinking and drunkenness. The age-related decrease in the severity of judgements about the morality of drinking was specifically related to the moderate consumption of relatively weaker alcoholic drinks. This trend does not appear to reflect a general age-related increase in the extent to which 10- to 14-year-olds are defying or rebelling against parental wishes or values.

Terms like 'adolescent rebellion' or 'generation gap' are often used to suggest that there are fundamental and irreconcilable differences between the values held by teenagers and adults. There is little empirical support for this extreme view (Musgrove, 1964; Conger, 1977). In fact, there appears to be considerable continuity in the values held by parents and children. The influence of the peer group does increase during the preadolescent and adolescent years. However, parental influences appear to be predominant in such areas as moral beliefs whereas peer influences become of increasing importance in such areas as fashion and entertainment. In the present study, the results summarised in Figures 6.1 and 6.2 (pages 46 and 47) indicate that 10- to 14-year-olds

perceive children most liked by grown-ups and children most liked by peers as sharing many of the characteristics making up the Evaluative dimension. This dimension could just as well have been called a 'Morality' or 'Conformity' dimension (see, for example, Heather, 1977). The major difference between the children's perceptions of children most liked by peers and children most liked by grown-ups was that the former were seen as being rather more extraverted in their behaviour. More important with respect to the issues under investigation, although 'boys/girls who drink a lot' were perceived as being more favourably regarded by peers than by grown-ups, most of the children perceived them as possessing characteristics disliked by grown-ups and children. There is little indication of a marked 'generation gap' here.

Although the age-related increase in consumption cannot be explained in terms of simplistic concepts like 'adolescent rebellion' or 'generation gap', several of the findings reported here suggest that peer group influences are important during the preadolescent years. The results described in Chapter 5 indicate that the extent to which the children saw themselves as being influenced by parental decisions (Parental Control) decreased and the extent to which they saw themselves as being influenced by peers (Peer Group Pressure) increased with age. Moreover, both kinds of pressure were associated with the gross measure of drinking experience. Boys and girls classified as Non-drinkers tended to see themselves as being more influenced by parents and less influenced by peers than did children classified as Drinkers. Boys and girls classified as Tasters occupied the middle position in both respects.

The association between drinking experience and Parental Control is not surprising. We would expect parents who exert control over bedtimes, excessive consumption of sweets, choice of comfortable footwear, etc. to exert controls over the drinking activities of their children. However, given that most of the drinking activities mentioned occurred in the presence of and were apparently controlled by parents, the association between drinking experience and Peer Group Pressure may appear surprising. In Davies & Stacey's study of 14- to 17-year-olds the influence of the peer group was clearly apparent: with increasing age, more alcohol was consumed in the company of peers. Although a similar trend was found in the present study, only 20 per cent of the 14-year-olds mentioned drinking outside of the parental home or the home of adult relatives or friends of the parents in the absence of parents. However, it seems likely that peer pressures influence pastimes and expressions of tastes which for most 10- to 14-year-olds are to a considerable extent under the control of parents. For example, although most parents provide at least the basic essentials of their children's clothing, the choice of clothing is often influenced by children's tastes, which in turn are influenced by fashions favoured by peers. Therefore, we might expect children whose peers support (or are perceived to support) drinking activities to exert pressures upon parents when alcoholic drinks are being consumed.

The differences between Non-drinkers, Tasters and Drinkers on the Peer Group Pressure and Parental Control scales were clearly apparent in the results obtained from both boys and girls. For the boys classified as Drinkers, heavier consumption (as measured by the Drinking Index) was also associated with higher scores on the Peer Group Pressure scale and lower scores on the Parental Control scale. However, the associations between the girls' scores on these scales and their scores on the Drinking Index were not significant. If we assume that peer group pressure and parental control are important in determining drinking patterns, then it seems that although both are important in determining

whether or not girls drink—or in determining the gross differences between Non-drinkers, Tasters and Drinkers—they appear to be of less importance in influencing the amounts consumed by girls who do drink. The reason for this seems to be that girls (and women) appear to be under less pressure than boys (and men) to 'prove themselves' by drinking large amounts (Orford *et al*, 1974); therefore, contrary pressures from parents are probably not required to the same extent.

The changing associations with age between peer influences, parental control and alcohol consumption hypothesised by Jahoda & Crammond are clearly apparent in the results obtained from the boys classified as Drinkers. For these boys, higher Parental Control was associated with lower levels of consumption at each age; however, at 14 the association was not significant. On the other hand, higher Peer Group Pressure was associated with higher levels of consumption at each age; however, only at 14 was the association significant. This pattern is consistent with the view that the influence of the peer group on drinking activities becomes more important at the onset of adolescence. However, two points should be emphasised here. First, this changing pattern of influences was observed only among boys who reported more than a minimal experience of drinking. Secondly, this finding should not be taken to indicate that parents have little influence on the amounts consumed by 14-year-old boys. In the present study, a majority of the boys did not mention drinking in the absence of parents. Furthermore, for many children, parental influences are often indirect—being mediated by parental attitudes towards their choice of friends and activities outside the home. It is worth noting in this context that the multiple correlation analysis described in the previous chapter showed that the variables referring to drinking in the absence of parents and parental control *both* accounted for significant proportions of the variance in the boys' Drinking Index scores. This suggests that boys who drink in the absence of parents *and* who perceive themselves as being little influenced by parental decisions drink more than boys who drink in the absence of parents but who see themselves as being likely to take account of parental wishes. Thus it seems that parental influences on drinking activities are important even when parents are not present.

Although the results discussed so far indicate that drinking experience is associated with the extent to which 10- to 14-year-olds perceive themselves as being influenced by their peers, the interpretation of the relationships between these two variables begs two important questions: Do 10- to 14-year-olds perceive their peers as supporting drinking activities? If so, are these perceived peer pressures used as guides to action?

The results described in Chapter 6 showed that 'boys/girls that most boys/girls like' tended to be perceived as good looking, easy-going extraverts who enjoy going out with pals and visiting discos. Although 'boys/girls who drink a lot' were seen as acting big and showing off and likely to get into trouble or fights, they were also seen as going out a lot with pals and as enjoying discos. 'Boys/girls who drink occasionally' were seen as occupying a position midway along the characteristics differentiating 'boys/girls who drink a lot' and 'boys/girls who never drink'. However, occasional drinkers were generally seen as being more extraverted than non-drinkers. Thus in *some* respects the perceived extraverted characteristics of children who drink were seen as being admired by most boys and girls.

Is this feature of the image of the drinker one of the sources of motivation for drinking? Davies & Stacey suggest that the stereotypes or images which



young people have of drinkers may be used as guides for action. Some of the findings in the present study are consistent with this notion. For example, the older children tended to perceive 'the ideal self' as being more extraverted than did the younger children. This indicates that some of the characteristics perceived as being possessed by drinkers, lacked by non-drinkers and admired by peers become more attractive with increasing age. Furthermore, the 14-year-olds classified as Drinkers tended to see the occasional drinker as approaching 'the peer ideal' of the easy-going extravert. Thus it does seem plausible to suggest that some part of the age-related increase in consumption is guided by the images which 10- to 14-year-olds have of drinkers and non-drinkers.

However, it should be noted that explanations in terms of simple causal relationships between peer group pressures and behaviour are not sufficient. We have already seen that most 10- to 14-year-olds consume alcohol in the presence of parents. Therefore, parental restraints on peer-guided behaviour are clearly important. Furthermore, the results described in Chapter 6 indicate that many of the children classified as Non-drinkers and Tasters (that is, children with little experience of drinking) had the same kind of image of the drinker as that possessed by children classified as Drinkers. This indicates that the mere possession of an image or stereotype is not a sufficient motivating force. Other factors must be involved.

The results described in Chapters 4 and 6 suggest that personality attributes play a part in influencing drinking activities. For example, children who mentioned engaging in what appear to be extraverted activities (going to discos, organised group activities) reported higher levels of consumption. Similar associations were reported by Davies & Stacey in the study of 14- to 17-year-olds. More recently, in a study of English university students, Orford *et al* (1974) reported positive correlations between extraversion (as measured by the Eysenck Personality Inventory) and a general involvement with and appreciation of alcoholic beverages. These findings suggest that the children's perceptions of drinkers as being more extraverted than non-drinkers have some basis in reality.

Associations between extraversion and alcohol consumption can be explained in one or both of two ways. First, given that drinking is often a part of social activities, extraverted children and teenagers may drink more because they enjoy such activities. It is worth noting in this context that many older teenagers and adults give 'to be sociable' as a reason for drinking (Dight, 1976). Secondly, it seems likely that extraverted children are more susceptible to peer group pressures.<sup>1</sup> If the peer group exerts some pressure in the direction of drinking then extraverted children may be more susceptible to this pressure.

Although the general pattern of results is consistent with the view that the peer group exerts some pressure in the direction of drinking, it is clear that some of the features of the image of 'boys/girls who drink a lot' were perceived as being unattractive. Furthermore, most of the children made severe judgements about the morality of drunkenness. The question remains, therefore, as to why some young people drink considerably more than their peers.

The multiple correlation analyses described in Chapter 7 showed that two sets of variables were important predictors of the boys' scores on the Drinking Index. One set refers mainly to parental influences. These have already been discussed. The heavier drinkers amongst the boys tended to hold a less strict or

<sup>1</sup> Beloff & Temperley (1972) have shown that 12-year-olds who are popular with their peers tend to see themselves as being more responsive to peer pressures. The results described in Chapter 6 suggest that children who are popular with their peers tend to be perceived as being more extraverted than less popular children.

more permissive view of the morality of drinking and smoking, perceived themselves as being less influenced by parental decisions and were more likely to drink in the absence of parents.

The second set of variables refers to the perceptions boys have of themselves and of boys who drink. Most of the children at each age level perceived 'boys/girls who drink a lot' as rowdy extraverts. The heavier drinkers amongst the boys tended to see themselves in this light. However, as they also tended to view 'the ideal self' in a similar manner this means that they were less inclined to condemn rowdy behaviour.

The heavier drinkers amongst the boys also tended to perceive drinkers (both 'boys who drink occasionally' and 'boys who drink a lot') as easy going or sociable. This view is in obvious contradiction to that held by the majority. Most of the children perceived children who drink a lot as being difficult to get on with or unsociable. Thus the non-drinkers and moderate drinkers tended to perceive heavy drinkers as *unsociable* rowdy extraverts whereas the heavier drinkers amongst the boys tended to perceive 'boys who drink a lot' as *sociable* rowdy extraverts.

The finding that the heavier drinkers amongst the boys perceived themselves as rowdy extraverts is of interest for two reasons. First, as one of the features of 'rowdy extraversion' was getting into trouble or fighting it is consistent with suggestions that heavy drinking is associated with delinquent behaviour (Stacey & Davies, 1970). This does not necessarily mean that alcohol is a causal or crucial factor in anti-social behaviour. As Davies & Stacey suggest, it is possible 'that at least a significant proportion of [heavier drinkers] are motivated not only by the desire for toughness, attractiveness, sociability, etc., but by an additional need to express delinquent or anti-adult proclivities through heavy drinking'.

Secondly, the characteristics subsumed under the label 'rowdy extraversion' have much in common with those describing the 'impulsiveness' factor associated with a number of problem behaviours (see, for example, Braucht *et al*, 1973). Of particular importance, it has been suggested that high levels of impulsiveness in childhood and adolescence may be predictive of future problem drinking (Mandell & Ginzburg, 1976). Although the processes underlying this association are not clear, Mandell & Ginzburg suggest that the lack of internal control which is characteristic of impulsiveness (particularly in the use of aggression) is due to a lack of effective parental training during childhood. There is clearly a need for further research in this area.

The variables which differentiated between Non-drinkers, Tasters and Drinkers amongst the girls were similar to those which differentiated between similar groupings amongst the boys. However, the variables which characterised the heavier drinkers amongst the girls bore little resemblance to those which characterised the heavier drinkers amongst the boys. Girls who reported higher levels of alcohol consumption admitted to more smoking experience, were more intolerant of non-smokers (and non-drinkers), expressed more envy of the greater freedom given to older girls and tended to perceive occasional drinkers as likely to get into trouble or fights.

The common denominator of this complex of characteristics appears to be a somewhat aggressive involvement in smoking and drinking activities (aggressive in the sense that non-smokers and non-drinkers are rejected) coupled with a desire for more freedom. The underlying factors are difficult to pinpoint. However, it is possible that some of them are related to recent changes in social attitudes towards sexual equality. The heavier drinkers amongst



the girls appear to have expressed a general resentment of restrictions on their freedom together with an admission or declaration of their involvement in activities which at least until recently have been regarded as the prerogative of precocious boys.

This interpretation is admittedly speculative. However, it accords with comments made by teachers during our visits to schools. For example, several teachers mentioned that one of the most marked changes which they had observed over the past few years was an increase in the number of girls who were quite blatantly smoking near school grounds.

Furthermore, a similar explanation has been offered in relation to recent changes in English children's smoking behaviour. As noted in Chapter 3, Rawbone *et al* (1977) suggest that smoking rates among English secondary school boys have fallen, particularly among younger age groups. However, among girls, there has been little change, or possibly a slight increase, so that the difference between the sexes is much smaller than hitherto. Rawbone *et al* suggest that this may be a reflection of recent changes in attitudes towards greater sexual equality. In the present study, the absence of marked differences in alcohol consumption between boys and girls and the complex of characteristics which most effectively predicts heavier drinking in girls may represent additional manifestations of this change.

## 9 Implications for health education

Readers interested in children's health and well-being have probably drawn their own conclusions from the results described and discussed in previous chapters. No special authority is claimed for the suggestions made in this section. However, the proposals discussed—taken in conjunction with those discussed by Davies & Stacey (1972) and Jahoda & Crammond (1972)—may help to provide a preliminary framework for future debate. Certain findings and possible implications for health education strategies overlap with those described in the two previous reports. However, sufficient time has elapsed since the publication of these reports to allow further consideration of some of the views expressed.

### 9.1 Health education in schools

#### *(a) Target groups*

At least until recently there appears to have been an implicit consensus that primary school children are too young to be able to understand health education materials related to alcohol and drinking. However, the results of Jahoda & Crammond's study indicate that many 6- to 10-year-olds have direct experience of alcohol and most 8- to 10-year-olds have attained an operational concept of alcohol. For these reasons, Jahoda & Crammond suggest that some elements of health education concerned with alcohol could be introduced during the later primary school years.

Some educationists and policy-makers may have been loath to generalise from the results of one investigation conducted in Glasgow. However, the results of the present study of children living in a number of quite different catchment areas in the Central Region of Scotland give additional support to the view that primary school children are not naive with respect to alcohol. Most of the children said they had the first drink they could remember tasting during the primary school years. Moreover, the results also indicate that the concept of alcohol held by the 10-year-olds involved more than just an operational scheme enabling them to contrast alcoholic and non-alcoholic drinks. Their judgements of the morality of drinking activities indicate that they were aware that alcoholic drinks vary in potency—that is, that there are sub-classes within the general category of alcoholic drinks. Thus health education about the effects of alcohol could begin during the later primary school years.

It should be noted that the results of the present study also indicate that important features of the stereotypes or images which 14-year-olds have of

heavy drinkers, non-drinkers, smokers and non-smokers are present at the age of 10, although in a less differentiated or less clear-cut form. This suggests that health education directed towards making children more aware of the motivational pressures which may influence drinking activities *could* begin during the later primary school years. Since the influence of the peer group and probably the mass media appear to produce an increasing disposition towards drinking over the years 10 to 14, some elements of health education directed towards making these sources of motivation more apparent might help children to deal with the increasing pressures which they will face during the secondary school years.

### *(b) Strategies*

It is clear that health education recommending that children abstain from trying alcoholic beverages would be met with considerable resistance. Most health educators appear to view the age-related increases in the moderate amounts typically consumed during preadolescence and adolescence as a realistic and useful preparation for adult life. Many parents appear to have similar views. The results of the present study indicate that most 10- to 14-year-olds are given alcohol by parents and few 10- to 12-year-olds drink outside of the parental home or the homes of relations in the absence of parents. Therefore, much of the increase in consumption over these years appears to occur with at least the tacit approval of parents. Even for 6- to 10-year-olds, recommendations that children should never drink would conflict with experiences which most children have in the parental home. Thus teachers contemplating introducing some elements of health education into their lessons should beware of taking an uncompromisingly negative attitude with respect to children's experiences of alcohol.

Young people should be aware of the positive and negative effects of alcohol and the nature of alcoholism. Since children of about 8 and above appear to be capable of assimilating this kind of information and as such children appear to have a minimal amount of knowledge about the effects of alcohol, apart from an awareness of the causal link between alcohol and drunkenness, some kind of rudimentary education about the effects of alcohol should begin during the later primary school years (Jahoda & Crammond, 1972).

Davies & Stacey and Jahoda & Crammond suggest that sermonising and the use of shock tactics are undesirable. Sermonising probably undermines the credibility of the source of information. Shock tactics which attempt to frighten children (and adults) may lead to avoidance of those who use such tactics rather than of the harmful object.

The authors of a recent DES report, *Health Education in Schools* (HMSO, 1977), give many examples of how elements of health education can be slipped naturally into various parts of the school curriculum without clumsily drawing children's attention to the topics. For example, some of the effects of tobacco smoke and other substances (eg asbestos dust) can be *mentioned* when describing how the efficiency of the gas exchange mechanism of the lungs is related to their effective (undamaged or usable) surface area. Thus by a slight shift of emphasis teachers can illustrate how our understanding of the biology of respiration supports the view that smoking is harmful. Reference to some of the properties and effects of alcohol can be made during explanations of fermentation and descriptions of the nervous system.

Although this kind of incidental teaching seems to fit more easily into science lessons, the authors of the DES report give examples of how teachers of geography, history, home economics and literature can introduce materials related to alcohol into subject lessons. For example, they suggest that the geography of Europe is incomplete without reference to the wine producing areas. Here, of course, the positive and enjoyable aspects of moderate drinking as well as the possible consequences of heavy drinking can be mentioned.

It is probably easier to introduce elements of health education concerned with alcohol during the course of secondary school education. However, the recent DES report gives examples of projects in primary schools which appear to have been particularly well designed. For example, here is an H M Inspector's description of one experiment:

'Interest in health education arose as a response to the dangers of smoking even among children under 11. But the headmaster decided, in consultation with parents, to explore the uses of the ITV programme "Living and Growing". He also decided not to treat this in isolation, but to regard simple study of the human life cycle as the culmination of a programme of work on the family and the community. There has evolved, for the boys and girls in their fourth year, a two-term course called "The Family—a Social and Biological Study", taught by an experienced woman member of the staff and the headmaster. Emphasis is placed on the notions of the roles, responsibilities and needs of various members of the family, and then, in a community such as a school, the need for security, consideration for others, and for some rules of conduct. The human family is contrasted with the methods adopted by various animals in caring for their young, and a wide range of legends, stories and modern writing is woven into the scheme. Consideration is then given to the way in which human beings function, the senses, the digestive system (with a glance at the beginnings of nutrition) structure (with a look at a dissected rat—not dissected in front of the boys and girls), and breathing, including a simple study of the atmosphere and references to air pollution and to smoking. The work is concluded by reference to the human life cycle, including introductory discussion of inherited characteristics such as tongue curling and eye colour'.

This project introduced incidental information about air pollution and smoking without labouring to draw the children's attention to the issues. It would be possible to mention some of the effects of alcohol in projects primarily concerned with nutrition or the biology of aggressive and social behaviour. Jahoda & Crammond suggest that older primary school children find this kind of information very interesting.

The introduction of factual information about the effects of alcohol into traditional subject areas will make considerable demands on the skills of teachers. The authors of the DES report suggest that if health education is to be a continuing process, during which a variety of topics is to be examined from different perspectives, then it should not be regarded as a responsibility for subject teachers to discharge as they see fit. This of course is not to deny the right and responsibility of teachers to judge the optimum moment to introduce such topics. However, it does mean that some kind of overall planning is necessary. The authors of the DES report suggest that schemes in which a senior teacher, or group of senior teachers, is responsible for identifying, encouraging and co-ordinating health education in traditional subject areas

may be useful because they encourage teachers to look at their subjects from another point of view. It must be recognised of course that such schemes should allow teachers time for reading, reflection and planning.

The provision of basic information about the effects of alcohol is not sufficient. It would be naive to believe that some young people drink excessively merely because they have not been given information about the possible dangers involved. The results of the present study, taken together with results reported by Davies & Stacey and by Bynner (1969) in his study of young smokers, suggest that certain features of the stereotypes or images which young people have of drinkers and smokers appear to provide important sources of motivation. Young people perceive drinkers and smokers as being generally more extraverted and tougher than non-drinkers and non-smokers. As Jahoda & Crammond and Davies & Stacey suggest, health education strategies should be directed at raising children's awareness of the nature of pressures arising from stereotypical misconceptions and of how stereotypes are used in programmes of mass persuasion.

The results of the present study, taken in conjunction with results reported by Davies & Stacey and Orford *et al* (1974), suggest that it would be untruthful and therefore unwise for health educators to take the line that the stereotypes or images which young people (and probably many adults) have of drinkers and abstainers have no bases in reality. There is an association between extraversion and involvement with and appreciation of alcohol; there does appear to be an association between alcohol consumption and aspects of toughness related to rebellious and adventurous behaviour. Attempts to deny these relationships would probably be met with resistance.

However, it is important that young people realise that such stereotypes present a travesty of reality. Many non-drinkers are not introverts. Although the non-drinkers in the present study tended to agree with the majority view that 'boys/girls who never drink' are rather introverted in their behaviour, they did not generally perceive themselves in this way. Furthermore, young people should be aware that excessive drinking does not in some magical way confer sociability or toughness.

Attempts to change some perceptions are less likely to be met with resistance. Although children who are popular with their peers—particularly those who are most liked by the opposite sex—were perceived as being extraverted, many of the children saw themselves *and* their ideal selves as being less extraverted than this 'peer ideal'. This indicates that attempts to question the desirability of displays of extraverted behaviour would receive a measure of support. Such attempts, if successful, might reduce temptations to drink heavily in order to achieve the outward trappings of the extravert.

Attempts to change other perceptions are even less likely to be met with resistance by the majority of children. Although the heavier drinkers amongst the boys tended to perceive 'boys who drink a lot' as being easy to get on with, most of the children perceived them as being relatively difficult to get on with or unsociable. This means that attempts to get children to consider some of the anti-social consequences of heavy drinking would not be rejected out of hand. Furthermore, the heavier drinkers amongst the girls tended to perceive non-drinkers (and non-smokers) as having a 'holier-than-thou' attitude. Some non-drinkers may indeed hold such an attitude. If so, health educators should attempt to lead them to reconsider this view and become more tolerant of drinkers. However, since most of the children did not perceive non-drinkers (or non-smokers) in this way, it seems that group pressures might act in the

direction of making drinkers more tolerant of non-drinkers and non-smokers.

We have seen how teachers can introduce elements of health education related to alcohol into traditional subject areas. Teachers who provide courses in social studies can introduce material related to the motivational influences underlying drinking (and smoking) into their classes. However, it seems that traditional methods of instruction are not ideally suited to the task of raising children's awareness of the nature and dangers of oversimplified attitudes, beliefs and opinions. As Davies & Stacey and Jahoda & Crammond suggest, rebellious children—children who stand to gain most from this kind of understanding—may be the least likely to benefit from traditional methods of instruction. For this reason they suggest that children and young people should be given the opportunity of discussing their ideas, feelings and experiences in an informal and relaxed atmosphere.

Davies & Stacey (1971, 1972) have made several recommendations as to how informal group discussion sessions should be run. First, the teacher or group leader should provide a non-threatening and relaxed setting in which children can take a leading part in discussion. Clearly, discussion groups will serve little purpose if the children taking part view them as just another attempt by authority figures to air their prejudices about the behaviour of young people.<sup>1</sup> Secondly, this does not mean that the group leader should merely sit in the background and allow a completely unguided 'free-for-all'. He (she) should attempt to draw attention to relevant issues which have been overlooked. For example, at some point, the issue of controlled or moderate drinking should be raised in order to avoid concentration only on the harmful effects of heavy drinking. At some point, techniques of mass persuasion should be discussed. As the recent DES report suggests, this may be especially interesting to young people who do not like to be 'conned'. Thirdly, the group leader must be able to provide relevant and accurate information when required. Fourthly, discussion groups should not be organised solely around the topics of drinking and smoking. Education about alcohol should be incorporated within broader programmes of health education which examine a variety of topics.

It is clear that some kind of training—with time for reading, reflection and planning—seems to be an essential prerequisite for teachers—whether specialist health educators or not—who are prepared to and who have the qualities to undertake this kind of task.

## 9.2 Health education for parents

No attempts were made in the present study to question children about the drinking activities of their parents. However, Dight's (1976) study of Scottish

<sup>1</sup> Davies & Stacey and Jahoda & Crammond suggest that detached and neutral outsiders may be better suited for this purpose because high levels of alcohol consumption appear to be associated to some extent with rebellion against the school and against authority in general. This and similar suggestions have been questioned (Oppenheimer, 1974; DES report, 1977). The following points are worth considering during subsequent debates which refer to this issue: (1) It is likely that competent outsiders—whether specially designated health educators, doctors, nurses or whatever—would also be regarded as part of the 'system'. This, of course, is not to belittle the contributions that specialists can make in continuous and well-integrated programmes of health education. (2) Recommendations of this kind appear to suggest that there is a rigid distinction between the teaching and pastoral roles of teachers. (3) Specialists responsible for perhaps 30 or more classes are unlikely to be able to get to know their pupils. It is worth noting here that Davies & Stacey suggest that discussion groups should not exceed more than about 10 individuals. (4) Skilled teachers are best able to judge the right moment for introducing sensitive topics.

drinking habits showed clear associations between earlier parental drinking practices and present consumption in older teenagers and adults. Since it is now much more the norm for mothers and fathers of young children to drink (Dight, 1976) and as more young children are being introduced to alcohol in the parental home than in previous generations, it seems that the examples set by the present generation of parents will be of even greater importance in determining the future behaviour of their offspring. As the authors of the recent DES (1977) report suggest, the 'foundations of behaviour and of knowledge in which health education is rooted are best laid in the home'.

It is unlikely that pessimistic warnings that children are running around in drunken abandon or dire warnings to parents to mend their ways will prove to be the most effective or the most truthful way of putting this message across. The results described in the present report indicate that some children do drink in the absence of parents and that those who do tend to drink more than those who drink only in the company of parents. Parents should be aware of this. However, most 10- to 14-year-olds consume small amounts of alcohol in the presence of parents and most parents appear to control their children's consumption with due regard to age differences.

It is likely that most parents are aware that few young children—particularly those still at primary school—drink excessively. Thus parents who themselves are heavy drinkers may not be able to see the link between their own behaviour and that of their children. It is important that they realise that the examples which they present are likely to influence the *future* behaviour of their children.

As McKennell & Thomas (1967) suggest, in relation to attempts to discourage smoking, the best strategy is to present ideas which fall within a 'latitude of acceptance' (that is, ideas which are not too far removed from the point of view of the intended recipients). One approach might be to publicise the dangers (future perhaps more than present) which may accrue from irresponsible parental behaviour while extolling the positive features of the behaviour of many parents. Excessive emphasis on alcohol can be avoided by embedding alcohol-related messages within a wide-ranging series of messages concerned with the influence of parental models and attitudes on children's present and future health and well-being.

It seems likely that wide-ranging programmes of health education directed at parents may influence behaviour related to drinking even if drinking practices are rarely mentioned. In the present study, children who saw themselves as being influenced by parental decisions about bedtimes, dangers in the home, eating sweets, unsuitable footwear and homework tended to report lower levels of drinking experience. This indicates that successful attempts to influence parental knowledge, attitudes and behaviour with respect to threats to children's health and well-being other than those presented by alcohol, may have a 'carry-over' effect with respect to the care and concern with which parents regard children's drinking activities.

Many responsible parents may feel that they can exert little influence on their children's behaviour outside of the home in the face of opposing pressures from their children's friends or from the mass media. Certain findings in the present study suggest that this view is unduly pessimistic. For example, boys who said they sometimes drink in the absence of parents *and* who perceived themselves as taking account of parental decisions reported lower levels of alcohol consumption than boys who said they sometimes drink in the absence of parents but who saw themselves as being under relatively low levels of parental control. Thus parents who feel they can have but little influence on



their children's activities outside of the home should be encouraged to take a more optimistic view.

The associations between higher levels of parental control and lower levels of drinking experience found in the present study should not be taken to mean that parents should forbid their children to drink. Most parents do allow their children to drink small amounts; therefore, such a plea would meet with resistance. Furthermore, Davies & Stacey and McKechnie *et al* (1977) suggest that parents who exert very strict controls over drinking run the risk of their children engaging in clandestine drinking activities. Such children typically consume more than those who drink in the company of parents. Certain findings in the present report are consistent with this view. A greater proportion of children who said they sometimes drink in the absence of parents said they were introduced to alcohol by other children. Moreover, drinking in the absence of parents was associated with higher levels of consumption.

Thus Davies & Stacey's suggestion that children should be introduced to the controlled and moderate use of alcohol in the home has the ring of common sense about it. To most parents it will be fairly uncontentious as this seems to happen in most families already. However, great care should be taken when preparing recommendations based on this and similar suggestions. Recommendations should not be phrased or portrayed in such a way that they imply that *all* parents should do this. Dight's study of Scottish drinking habits shows that about 1 out of 10 men and women who are parents of young children do not drink. Suggestions that they should introduce their children to alcohol, that they should practice that which they do not preach, would be unwarranted. Such suggestions would also meet considerable resistance. However, although health educators should respect the views of abstainers, non-drinkers should be aware that admonitions referring to the 'wickedness' of drinking, or to the 'evil' of alcohol, may increase the probability that their children will use alcohol if they feel a need to reject parental authority.

### 9.3 Advertising

Davies & Stacey suggested that attempts should be made to bring advertisers to consider more carefully the dangers to young people of messages which associate alcohol consumption with toughness, sociability, attractiveness to the opposite sex, etc. Six years have elapsed since the publication of their report.



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Appendix A

# Letter to parents from the University of Strathclyde\*

Dear Parent,

The Scottish Health Education Unit has asked us to carry out a study of children's attitudes towards various aspects of health care.

With the permission of the Headteachers, we are selecting a random sample of children for individual interviews in schools. They are designed to provide a general picture of their attitudes towards things like smoking, drinking, consumption of sweets, choice of footwear. Our concern is with attitudes expressed by large numbers of children; information about individuals will not be disclosed.

If you prefer that your child should not take part, please inform the Headteacher of his or her school by completing the form below. However, we do hope that you will allow your child to help us if he or she happens to come into our sample. The information obtained from these studies will be important in helping the Scottish Health Education Unit to plan effective health education programmes.

Yours sincerely,

Philip P. Aitken,  
*Research Lecturer.*

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I prefer that†..... should not take part in the health education study.

Date..... Signature of  
Parent or Guardian.....

†Please print full name of child.

\*The Headteacher of one school contacted parents with a modified version of this letter which requested non-consenting and consenting parents to complete the form.

## Appendix B

# Interview schedule and procedures

The major questions and explanations of procedures were standardised. These are given in full below. However, elaborations and prompts were used when necessary and the children were encouraged to engage in relaxed conversation when answering the open-ended questions.

### Introductory explanation

'I'm Mrs. McDonald from the University of Strathclyde and we're interested in what young people think about various things, what they like to do in their spare time and what they think they'll be doing when they're older and have left school.

This isn't a test or examination. Actually we're trying to learn something from you. We want you to tell us what you really think. So I'm not going to put your name on these papers, and the only people who will see what you say will be the people at the University where we will put together what all the boys and girls have told us so that we know what they think about various things.'

### School leaving age/Parental occupations

- Q.1 How old will you be when you leave school?
- Q.2 What do you think you are going to do then?
- Q.3 Young people have various reasons for choosing jobs. Sometimes they would like to do what their parents do. How do you feel about that?

### Peer Group Pressure

The questions used to assess the extent to which the children perceived themselves as being influenced by their friends were constructed from 10 items in Form Y of Bronfenbrenner's Moral Dilemmas Scales (Bronfenbrenner, 1967). The items in these scales describe conflicts which can be resolved according to peer-approved or adult-approved solutions. The first question was preceded by an explanation and Questions 4, 6, 9, 10 and 13 were changed to suit the sex of the respondent when girls were being interviewed. In the original scale these items refer specifically to boys.

Children who seemed reluctant to answer were given prompts (eg 'What would you be most likely to do?') and the options repeated. The initial question in each item was followed by an enquiry as to how sure the child felt he (she) would behave in this way. The child answered this by pointing to or reading one of the answers on a visual aid card:

absolutely sure

fairly sure

not very sure

- Q.4 The first thing we'd like you to do is to answer some questions that boys and girls (girls and boys) have been asked in America, Canada and various other places. We'd like to find out if young people in Scotland have the same or different ideas. Some of the questions were about times when you get into a spot where it's hard to make up your mind, but you still have to decide. For example one of them was: You are out in the town one evening with some friends. They suggest you ring some doorbells and run away. What would you really do in this situation? Tell them they shouldn't do it, or let each one do what he (she) wants?  
How certain or sure are you that you would do this? AS FS NVS
- Q.5 Suppose your friends decided to ring a few doorbells. What would you really do? Go along with your friends, or refuse to go along with your friends?  
How sure are you? AS FS NVS
- Q.6 One day one of your friends whom everybody likes came to school with his (her) sweater on backwards. This caught on, and soon all your friends are wearing sweaters the same way. They want you to do it too. Your parents don't say you can't do it, but you can see they'd like it better if you didn't wear your sweater backwards. What would you really do in this situation? Stop wearing the sweater like your friends do, or dress like your friends do?  
How sure are you? AS FS NVS
- Q.7 Each member of your class had to choose one of several projects to work on with a few others. When the choices were announced it turned out that most of your friends had picked another project that you were not so interested in, and none had picked the one you had chosen. Your friends want you to switch over to their project. The teacher said you can change your choice if you want to. What would you really do? Not change to work with your friends, or change to work with your friends?  
How sure are you? AS FS NVS
- Q.8 You and the friends you go around with have just started a game of cards with a friend who has been sick when someone remembers that it is the last day of the fair. None of you has had a chance to see it and it's supposed to be very good. If you all leave right away there would still be time to get there. The sick friend wouldn't be able to go, but the rest of your friends all seem to be going. They want you to go with them. What would you really do? Refuse to go along with your friends, or go along with your friends?  
How sure are you? AS FS NVS

- Q.9 There's a new boy (girl) who's been going around with you and your friends. This boy (girl) is lots of fun, and everybody likes him (her). But after your friends were over at the house the other day, you realised that your parents didn't like your new friend too much. They didn't say anything about it, but you can see that they'd like it better if you didn't see too much of this boy (girl) in future. What would you really do? Keep on going around with this friend, or stop seeing this friend?  
How sure are you? AS FS NVS
- Q.10 You and some friends are walking out on an abandoned road when you notice a tree in the field all laden with ripe fruit. There is a weather-beaten sign saying 'No trespassing' but no fence. The others suggest that you all go over and eat some fruit. It's a kind that you like very much. What would you really do? Let each one do what he (she) wants, or tell them they shouldn't do it?  
How sure are you? AS FS NVS
- Q.11 Suppose all your friends went ahead to eat the fruit. What would you do? Refuse to go along with your friends, or go along with the rest of your friends?  
How sure are you? AS FS NVS
- Q.12 You have a chance to go to camp this summer. There are two possibilities. One camp has special classes in things you are especially interested in, but some of your friends are going to another camp. Your friends want you to come with them. What would you really do? Go to the camp with your friends, or go to the camp with special classes?  
How sure are you? AS FS NVS
- Q.13 In your neighbourhood a new family has moved in. They come from Spain and have one child who is in your class at school. He (she) understands English but doesn't say very much. In a few days it will be Hallowe'en and you plan to go out playing practical jokes on people with your special friends. Someone asks if you should take this Spanish boy (girl) along, but most of your friends are against it. They say: 'He (she) doesn't know what it's all about yet; we'll take him (her) later when he (she) speaks English better.' What would you really do in this situation? Refuse to go along with your friends unless this boy (girl) was included, or go along with the rest of your friends?  
How sure are you? AS FS NVS

### Parental Control/Parental Discussion

The extent to which the children saw themselves as being influenced by parental decisions (Parental Control) was assessed in a manner similar to that described in the preceding section. However, in this case the hypothetical situations referred to various conflicts between children and parents.

Each item in the Parental Control scale was followed by: 'Would you have talked it over with your parents?' This was followed by: 'How sure are you?' As before, the child answered this by choosing one of the answers on the display card. These additional questions formed the Parental Discussion scale.

- Q.14 I want you to imagine some similar things. Suppose your parents think it's time you went to bed. You are in the middle of doing something and don't feel tired. The next day is a Sunday, so you don't have to get up early. When will you go to bed? When you want to go, or when your parents want you to go?
- |  |    |    |     |
|--|----|----|-----|
| How sure are you?                                | AS | FS | NVS |
| Would you have talked it over with your parents? | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
- Q.15 You want to paint your bedroom a different colour, but your parents say it will look awful the colour you have chosen, and suggest another colour they think will look nice. Which colour will it be? The one your parents like best, or the one you like best?
- |  |    |    |     |
|--|----|----|-----|
| How sure are you?                                | AS | FS | NVS |
| Would you have talked it over with your parents? | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
- Q.16 Your parents don't like something you are reading, and suggest you ought to read something else. Which do you think you will read in the end? The book or paper they like, or the one you want to read?
- |  |    |    |     |
|--|----|----|-----|
| How sure are you?                                | AS | FS | NVS |
| Would you have talked it over with your parents? | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
- Q.17 Your parents think that you are eating too many sweets and say it's not good for you, but you want to carry on eating sweets.
- |  |    |    |     |
|--|----|----|-----|
| Will you stop eating so many sweets?             | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
| Would you have talked it over with your parents? | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
- Q.18 Your parents have been offering to buy you a new sweater and you have seen one you like a lot. When your parents see it they don't like it at all, and say they would rather you chose another one. Which sweater do you think you will get in the end? The one you like best or the one your parents like best?
- |  |    |    |     |
|--|----|----|-----|
| How sure are you?                                | AS | FS | NVS |
| Would you have talked it over with your parents? | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
- Q.19 You have been doing some work at school which you and some others have not quite finished during lesson time. The teacher says you can finish it off at home if you want to, but that you don't have to finish it if you are not very interested. You don't find the work interesting, but your parents say they think you ought to do it.
- |  |    |    |     |
|--|----|----|-----|
| Will you do the work?                            | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
| Would you have talked it over with your parents? | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |

- Q.20 You want to make some chips for yourself and some friends, but your mother is worried that you will burn yourselves or set fire to the fat in the chip pan and says she thinks you ought not to make them.
- |  |    |    |     |
|--|----|----|-----|
| Will you make the chips?                         | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
| Would you have talked it over with your parents? | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
- Q.21 Your parents want you to cut your hair in a different style, but you like it the way it is.
- |  |    |    |     |
|--|----|----|-----|
| Will you have your hair cut?                     | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
| Would you have talked it over with your parents? | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
- Q.22 You have saved up to buy some shoes you really like, but when you take them home your parents say your new shoes will be bad for your feet and that you ought not to wear them.
- |  |    |    |     |
|--|----|----|-----|
| Will you wear the shoes?                         | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |
| Would you have talked it over with your parents? | Y  | N  |     |
| How sure are you?                                | AS | FS | NVS |

### Siblings

- Q.23 Now tell me something about yourself. How many brothers and sisters do you have?

### Leisure activities

- Q.24 What kind of things do you do in your spare time?
- Q.25 What do you most like doing?
- Q.26 What about things older boys (girls) can do—those who have left school. Is there anything you envy them for—that you'd like to be able to do now?

Question 24 was followed, when necessary, by prompts to elicit evening, daytime, weekday, Saturday and Sunday activities.

### Drinking experience

- Q.27 One of the things that we are interested in is what young people think about drinking beer, whisky or any other alcoholic drinks. Have you yourself ever tried anything like that?
- |  |   |   |                       |
|--|---|---|-----------------------|
|  | Y | N | If N (28); If Y (29). |
|--|---|---|-----------------------|
- Q.28 By 'tried' I don't necessarily mean a whole glass. It may have been just a sip. How about that?
- |  |   |   |                       |
|--|---|---|-----------------------|
|  | Y | N | If Y (29); If N (31). |
|--|---|---|-----------------------|



Q.29 How old were you when you had your very first taste? Tell me about it.  
What happened?

Q.30 When was the last time you had some? What happened? Tell me about that.

Questions 29 and 30 were followed, when necessary, by prompts to elicit the following information: place, people present, source of drink, occasion (special or not), type of drink, amount consumed (size of can or bottle, amount relative to glass size, etc), frequency. After the child had described the last drink (Q.30) the interviewer asked if he (she) had ever had a drink elsewhere. Children who said they had were asked to say something about the last time they had a drink in each of the places mentioned. In this way detailed information was obtained about the last drink in one or more of the following settings: in the parental home; in the home of an adult relative or friend of the parents; in the home of a friend of the child; in the open air; on licensed premises.

#### Questions put to Non-drinkers only

Q.31 Did you ever want to taste it, or are there any other reasons?

Q.32 How do you feel about young people who drink?

Q.33 What about grown-ups?

#### Smoking experience

Q.34 We are also interested in what young people think about smoking.  
Have you ever tried smoking a cigarette?

Y N If N (35); If Y (36).

Q.35 By 'tried' I don't necessarily mean a whole cigarette. It may have been just a puff or two. How about that?

Y N If Y (36); If N (38).

Q.36 Have you smoked more than one cigarette?

Y N

Q.37 About how many do you smoke now?

#### Perceptions of drinkers, smokers, etc

Each child rated various kinds of boys and girls (*elements*) by referring to descriptions (*constructs*) on a series of 7 large display cards. The elements and constructs are shown in Tables B.1 and B.2.

The first display card (like discos, in between, don't like discos) was presented and the following explanation given:

'We're interested in what you think about various types of boys and girls which I'll describe to you in a minute or so. For instance, some boys and girls

like discos, . . . [here the interviewer brought the display card to the attention of the child and pointed to the relevant descriptions as she described them] . . . some do not and some could be described as feeling neither one way or the other—that is, “in between”. Try not to use the “in between” answer if you can, because we’d like to know what you really think. The first one is “boys (girls) that most boys like”. Do you think that they usually like discos, or don’t like discos, or are they “in between”?

The interviewer then read aloud the remaining elements and the child described each one by pointing to or reading one of the three descriptions on the display card. In this way the 30 elements were rated on each construct in turn. The elements were presented in the same order for each construct. However, each sex rated elements referring to their own sex before elements referring to the opposite sex.

Table B.1 Constructs

*Order of presentation*

1	like discos	in between	don't like discos
2	difficult to get on with	in between	easy to get on with
3	don't act big or show off	in between	act big, show off
4	cheeky	in between	not cheeky
5	don't go out much with pals	in between	go out a lot with pals
6	get into trouble or fight	in between	don't get into trouble or fight
7	nice looking	in between	not nice looking

Table B.2 Elements

(The elements and order of presentation described below were those given to the boys. For girls, the word ‘girls’ was substituted for the first word in Elements 1–17 and the word ‘boys’ substituted for the first word in Elements 18–30.)

Order	Order
1 Boys that most boys like	18 Girls that most boys like
2 Boys that your dad does not like	19 Girls that most boys do not like
3 Boys that most boys do not like	20 Girls who smoke
4 Boys who smoke	21 Girls that most grown-ups do not like
5 Boys like yourself	22 Girls that most girls like
6 Boys that most grown-ups do not like	23 Girls who never drink
7 Boys that most girls like	24 Girls that you like
8 Boys that your mum does not like	25 Girls that most grown-ups like
9 Boys who never drink	26 Girls who drink occasionally
10 Boys that most grown-ups like	27 Girls that most girls do not like
11 Boys that you would like to be like	28 Girls who drink a lot
12 Boys that your dad likes	29 Girls that you do not like
13 Boys who drink occasionally	30 Girls who do not smoke
14 Boys that most girls do not like	
15 Boys who drink a lot	
16 Boys who do not smoke	
17 Boys that your mum likes	

### Future leisure activities

Q.45 What kind of work did you say you will be doing when you’ve left school?

Q.46 What about your spare time? What kind of things do you think you'll do when you've left school?

Question 45 was designed to focus the child's attention on the kind of life he (she) expected to have on leaving school. The next question (Q.46) then followed smoothly. This question was followed, when necessary, by prompts to cover evening, daytime, weekday, Saturday and Sunday activities.

### Moral judgements

'Now for something rather different. I'm going to read out things that some people do and I'd like you to tell me whether you think it is wrong for boys (girls) of your age to do these things by giving your answer from this card.'

Here the interviewer produced and read aloud alternative answers on a large display card:

never wrong                      sometimes wrong                      usually wrong                      always wrong

The interviewer then read out the 23 activities listed in Table B.3. The child judged each in turn by pointing to or reading one of the answers on the display card. The task was then repeated according to the following instructions:

'Now I've asked you how wrong you think it is for boys (girls) of your age to do these things. Well, now I'm going to read them out again, but this time I want you to tell me how wrong you think it is for girls (boys) of your age to do these things.'

Half of the children in each Age  $\times$  Sex  $\times$  School group judged activities referring to their own sex before activities referring to the opposite sex; the other half judged activities referring to the opposite sex before judging activities referring to their own sex.

Table B.3 Activities

#### Order of presentation

1	Gamble
2	Play truant
3	Drink spirits like whisky, Bacardi or vodka
4	Go around in a gang
5	Smoke
6	Drink things like beer or lager
7	Cheat in class
8	Paint names on walls
9	Take drugs for fun
10	Argue with grown-ups
11	Steal
12	Drink things like shandy or cider
13	Get into pictures while underage
14	Read books that are supposed to be for grown-ups only
15	Get away without paying on a bus or a train
16	Start fights
17	Read in bed
18	Get drunk
19	Break windows
20	Show off
21	Not do what they're told
22	Stay out late at night
23	Tell lies

### Concluding questions

Q.48 Tell me, if you could be any age you wanted, any age you like, would you be older, younger, or are you happy with the age you are?  
O Y H If H (50).

Q.49 What is it that makes you want to be older/younger?

Q.50 Now imagine that you could be any famous person. Who would you want to be and why?

Questions 48 and 49, besides continuing Question 26, encouraged the children to talk about themselves and distracted their attention from the main areas of interview content. Question 50 carried this attempt a stage further and (hopefully) gave the children a conversation topic to take away from the interview.

# Appendix C

## Component loadings obtained from the INGRID Analyses of the 18 age x sex x drinking category groups\*

Table C.1 Boys classified as Non-drinkers

	Component I			Component II		
	10	12	14	10	12	14
<b>Elements</b>						
Boys +ve	0.65	0.89	-0.47	0.73	0.52	1.43
Dad -ve	-2.02	-2.10	-1.18	0.48	0.32	-1.00
Boys -ve	-1.04	-1.12	-0.43	-0.37	-0.86	-1.46
Smoke	-2.04	-2.23	-1.99	-0.18	0.12	0.59
Self	1.27	1.58	1.62	0.34	0.30	0.01
Grown-ups -ve	-1.99	-1.72	-1.72	0.06	0.57	0.38
Girls +ve	1.03	1.06	0.77	-0.39	0.92	1.69
Mum -ve	-1.49	-2.15	-1.66	0.61	0.26	-0.24
Never drink	1.49	1.57	1.48	-0.24	-0.23	-0.47
Grown-ups +ve	1.44	1.55	1.48	-0.13	-0.78	0.39
Ideal self	1.58	1.68	1.61	0.50	0.35	0.22
Dad +ve	1.34	1.67	1.68	-0.11	-0.50	-0.41
Drink occasionally	-0.54	-0.72	-0.82	-0.24	-0.30	0.11
Girls -ve	-1.17	-1.03	-1.10	-0.39	-0.67	-1.37
Drink a lot	-1.89	-2.11	-2.02	-0.33	-0.15	0.66
Never smoke	1.79	1.50	1.23	-0.20	0.14	-0.32
Mum +ve	1.58	1.69	1.50	-0.14	-0.00	-0.20
<b>Constructs</b>						
Don't like discos	0.21	0.40	1.18	0.75	-1.34	-2.25
Easy to get on with	2.51	3.58	2.56	0.54	0.11	0.89
Act big, show off	-2.75	-2.67	-2.51	0.46	0.54	0.54
Not cheeky	2.63	2.95	2.44	-0.29	-0.60	-0.71
Go out a lot with pals	-0.11	-1.17	0.58	0.94	0.36	1.86
Don't get into trouble or fight	2.93	2.75	3.00	-0.22	0.29	-0.10
Not nice looking	-2.95	-2.53	-2.17	-0.44	-1.18	-1.23
Percentage variance accounted for	87.03	84.99	68.43	5.23	7.82	23.31

\*The key to the symbols used to describe the elements is given in Table 6.1 (page 45).

Table C.2 Girls classified as Non-drinkers

	Component I			Component II		
	10	12	14	10	12	14
<b>Elements</b>						
Boys +ve	1.28	0.55	0.82	0.68	1.23	0.85
Dad -ve	-2.11	-1.52	-1.03	-0.19	-0.29	-0.20
Boys -ve	-1.23	-1.25	-1.63	-0.34	-1.19	-0.68
Smoke	-1.47	-1.68	-1.30	0.10	0.72	0.75
Self	1.29	0.96	0.34	-0.14	-0.18	0.03
Grown-ups -ve	-1.76	-1.72	-1.35	0.37	0.10	0.40
Girls +ve	1.46	1.09	1.25	0.46	0.70	0.08
Mum -ve	-2.08	-1.89	-1.35	-0.03	-0.25	0.42
Never drink	0.89	1.13	1.11	-0.27	-0.39	-0.48
Grown-ups +ve	1.43	1.54	1.76	-0.18	0.04	-0.15
Ideal self	1.50	1.84	1.32	-0.18	-0.04	0.57
Dad +ve	1.60	1.29	1.22	-0.09	-0.15	-0.98
Drink occasionally	-0.29	-0.26	-0.47	0.01	0.51	-0.36
Girls -ve	-1.63	-1.34	-1.80	-0.54	-0.72	-0.71
Drink a lot	-1.83	-1.94	-2.06	0.57	0.67	0.28
Never smoke	1.49	1.52	1.41	-0.13	-0.43	0.07
Mum +ve	1.48	1.67	1.74	-0.11	-0.31	0.12
<b>Constructs</b>						
Don't like discos	-0.66	0.28	-0.67	-1.15	-1.83	-1.27
Easy to get on with	2.95	2.22	2.45	-0.12	-0.11	0.32
Act big, show off	-2.50	-2.82	-2.69	0.34	0.35	0.20
Not cheeky	2.97	2.79	2.18	-0.09	-0.13	0.08
Go out a lot with pals	-0.06	-0.01	-0.95	0.45	1.25	1.62
Don't get into trouble or fight	2.75	2.86	2.54	-0.07	-0.01	-0.04
Not nice looking	-2.72	-2.49	-2.43	-0.34	-0.87	-0.16
Percentage variance accounted for	89.08	81.20	77.15	4.06	13.42	10.72

Table C.3 Boys classified as Tasters

	Component I			Component II		
	10	12	14	10	12	14
<b>Elements</b>						
Boys +ve	1.06	0.71	0.45	0.64	0.88	0.99
Dad -ve	-1.59	-1.52	-1.50	-0.08	0.03	-0.12
Boys -ve	-1.27	-1.27	-0.93	-0.71	-0.90	-1.15
Smoke	-1.84	-1.95	-1.71	0.44	0.53	0.50
Self	1.09	1.02	0.99	-0.03	-0.07	-0.02
Grown-ups -ve	-1.93	-1.83	-1.65	0.28	0.23	0.02
Girls +ve	0.64	0.94	0.50	1.01	0.87	1.32
Mum -ve	-1.59	-1.75	-1.88	-0.03	-0.00	0.09
Never drink	1.02	1.37	1.58	-0.49	-0.15	-0.89
Grown-ups +ve	1.67	1.67	1.69	-0.02	-0.07	0.22
Ideal self	1.40	1.41	1.39	0.03	0.02	0.36
Dad +ve	1.72	1.34	1.61	-0.19	-0.34	-0.24
Drinks occasionally	-0.14	-0.44	-0.42	0.32	0.03	0.03
Girls -ve	-1.40	-0.90	-0.85	-1.13	-0.95	-1.38
Drink a lot	-1.85	-1.79	-2.11	0.50	0.28	0.55
Never smoke	1.33	1.24	1.18	-0.34	-0.13	-0.28
Mum +ve	1.69	1.73	1.68	-0.20	-0.25	-0.03
<b>Constructs</b>						
Don't like discos	1.04	0.47	0.59	-1.64	-1.42	-1.75
Easy to get on with	2.55	2.51	2.46	0.13	0.38	0.33
Act big, show off	-2.12	-2.64	-2.67	0.43	0.30	0.70
Not cheeky	2.79	2.74	2.59	-0.01	-0.04	0.14
Go out a lot with pals	1.14	0.23	-0.31	1.07	1.12	1.69
Don't get into trouble or fight	2.66	2.48	2.80	-0.07	-0.36	-0.04
Not nice looking	-2.65	-2.56	-2.25	-0.48	-0.49	-1.05
Percentage variance accounted for	84.49	86.42	77.21	10.23	9.92	17.76

Table C.4 Girls classified as Tasters

	Component I			Component II		
	10	12	14	10	12	14
<b>Elements</b>						
Boys +ve	1.00	0.66	0.90	0.83	0.81	0.78
Dad -ve	-1.84	-1.92	-1.18	0.04	-0.13	0.21
Boys -ve	-1.16	-1.24	-1.40	-0.62	-1.15	-1.28
Smoke	-1.66	-1.87	-1.26	0.40	0.68	0.64
Self	1.04	0.98	0.52	-0.19	0.04	0.07
Grown-ups -ve	-1.75	-2.02	-1.76	0.14	0.46	0.62
Girls +ve	1.30	1.54	1.46	0.43	0.46	0.39
Mum -ve	-1.79	-1.95	-1.52	0.16	-0.05	0.06
Never drink	1.30	1.35	0.82	-0.32	-0.70	-0.44
Grown-ups +ve	1.35	1.75	1.53	-0.06	-0.10	-0.50
Ideal self	1.67	1.69	1.70	-0.02	0.48	0.35
Dad +ve	1.42	1.74	1.67	-0.18	-0.34	-0.45
Drink occasionally	-0.63	-0.31	-0.40	0.18	0.24	0.32
Girls -ve	-1.60	-1.76	-1.88	-0.61	-1.07	-1.02
Drink a lot	-1.74	-1.94	-1.89	0.12	0.67	0.53
Never smoke	1.39	1.42	1.17	-0.13	-0.32	-0.11
Mum +ve	1.70	1.88	1.49	-0.18	0.01	-0.16
<b>Constructs</b>						
Don't like discos	0.12	0.31	0.14	-1.10	-1.66	-1.39
Easy to get on with	2.41	2.87	2.36	-0.10	0.14	0.28
Act big, show off	-2.51	-2.99	-2.76	0.23	0.13	0.59
Not cheeky	2.84	3.07	2.83	0.02	-0.20	0.05
Go out a lot with pals	0.02	-0.29	-0.15	0.70	1.40	1.43
Don't get into trouble or fight	2.76	3.17	3.00	-0.27	-0.20	-0.16
Not nice looking	-2.98	-2.62	-1.69	-0.53	-0.81	-1.02
Percentage variance accounted for	92.86	87.27	81.06	5.33	10.96	13.38



Table C.5 Boys classified as Drinkers

	Component I			Component II		
	10	12	14	10	12	14
<b>Elements</b>						
Boys +ve	0.90	0.78	0.75	0.31	0.66	0.68
Dad -ve	-1.83	-1.75	-1.88	0.02	-0.00	0.04
Boys -ve	-1.41	-1.35	-1.48	-0.62	-0.76	-1.05
Smoke	-1.75	-1.64	-1.61	0.52	0.57	0.73
Self	1.26	0.77	0.86	-0.09	-0.08	0.16
Grown-ups -ve	-1.80	-1.63	-1.92	-0.03	0.11	0.36
Girls +ve	1.29	0.94	0.96	0.77	0.90	0.88
Mum -ve	-1.81	-1.72	-1.90	-0.22	0.01	0.01
Never drink	1.39	1.12	1.24	-0.58	-0.62	-0.86
Grown-ups +ve	1.37	1.48	1.56	0.08	0.03	-0.32
Ideal self	1.50	1.40	1.51	0.09	0.25	0.30
Dad +ve	1.70	1.61	1.63	-0.09	-0.09	-0.18
Drink occasionally	-0.51	-0.05	0.40	0.20	0.06	0.46
Girls -ve	-1.60	-1.39	-1.42	-0.45	-0.83	-1.32
Drink a lot	-1.83	-1.71	-1.54	0.48	0.51	0.66
Never smoke	1.34	1.33	1.23	-0.30	-0.53	-0.45
Mum +ve	1.79	1.80	1.62	-0.09	-0.18	-0.11
<b>Constructs</b>						
Don't like discos	0.21	0.26	0.04	-1.25	-1.33	-1.94
Easy to get on with	2.49	2.51	2.60	-0.14	0.31	0.39
Act big, show off	-2.53	-2.63	-2.82	0.18	0.37	0.36
Not cheeky	2.74	2.69	2.65	-0.06	-0.14	-0.26
Go out a lot with pals	0.31	0.57	0.57	0.78	1.19	1.47
Don't get into trouble or fight	3.02	2.65	2.79	-0.01	-0.39	-0.40
Not nice looking	-3.12	-2.29	-2.35	-0.33	-0.56	-0.45
Percentage variance accounted for	91.82	87.54	82.03	5.47	10.31	15.36

Table C.6 Girls classified as Drinkers

	Component I			Component II		
	10	12	14	10	12	14
<b>Elements</b>						
Boys +ve	0.94	0.62	0.67	0.32	0.87	0.76
Dad -ve	-1.78	-1.64	-1.80	-0.02	0.07	0.28
Boys -ve	-1.35	-1.18	-1.65	-0.88	-0.80	-1.29
Smoke	-1.73	-1.69	-1.45	0.57	0.66	0.74
Self	1.07	0.95	1.06	-0.03	-0.14	0.30
Grown-ups -ve	-1.78	-1.73	-1.95	0.02	0.17	0.44
Girls +ve	1.59	1.59	1.47	0.13	0.42	0.50
Mum -ve	-1.79	-1.84	-1.84	-0.09	0.11	0.25
Never drink	1.40	1.26	1.07	-0.14	-0.33	-0.75
Grown-ups +ve	1.56	1.39	1.66	0.05	-0.26	-0.41
Ideal self	1.31	1.54	1.61	-0.08	0.19	0.38
Dad +ve	1.47	1.49	1.66	-0.05	-0.27	-0.22
Drink occasionally	-0.21	-0.23	0.17	0.27	0.16	0.14
Girls -ve	-1.62	-1.82	-1.87	-0.61	-0.84	-1.13
Drink a lot	-1.97	-1.81	-1.95	0.68	0.27	0.47
Never smoke	1.25	1.42	1.43	-0.21	-0.34	-0.26
Mum +ve	1.63	1.66	1.72	0.08	0.05	-0.23
<b>Constructs</b>						
Don't like discos	0.02	-0.23	-0.29	-0.83	-0.99	-1.76
Easy to get on with	2.74	2.54	2.82	0.12	-0.04	0.15
Act big, show off	-2.43	-2.62	-2.90	0.56	0.22	0.23
Not cheeky	2.77	2.71	3.02	0.07	-0.27	-0.23
Go out a lot with pals	-0.11	0.14	0.37	1.05	1.30	1.43
Don't get into trouble or fight	2.99	3.02	3.05	0.02	-0.22	-0.55
Not nice looking	-2.81	-2.60	-2.39	-0.32	-0.65	-0.67
Percentage variance accounted for	91.51	89.02	85.03	5.39	7.98	12.57

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